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**A COMPREHENSIVE RAPID-ASSESSMENT-OF-  
FLUTTER / EJECTION-LOADS (RAFEL) SOFTWARE  
SYSTEM FOR AIRCRAFT / STORE COMPATIBILITY**

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## **FOREWORD**

This Phase I SBIR final technical report entitled "*A Comprehensive Rapid-Assessment-of-Flutter / Ejection-Loads (RAFEL) Software System for Aircraft / Store Compatibility*," has been prepared by ZONA Technology, Inc. (ZONA), under contract number FO 863501-C-0049, sponsored by The Department of The Air Force/Air Armament Center, Eglin Air Force Base, FL 32542. This report presents the findings as of January 16, 2002, from a research and development program begun April 16, 2001.

Mr. Ping-Chih Chen of ZONA was the Principal Investigator, Mr. E. Sulaeman and Dr. D.D. Liu of ZONA were co-principal investigators. Mr. Major Baron Cantly and Dr. Charles M. Denegri Jr. of Eglin Air Force Base were the Government Technical Monitor. The author would like to thank Dr. Denegri for providing structural and aerodynamic data and for his valuable comments and suggestions throughout the course of this development.

This report documents the entire work under the Phase I effort. It is published for the dissemination of technical information. The findings and conclusions are those of the authors and do not necessarily represent the views of the United States Government. Distribution of this report shall be in accordance with the Distribution Statement of the Report Documentation page found on the cover hereof.

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## ACRONYMS

AIC	Aerodynamic Influence Coefficient
ASE	Aeroservoelasticity
CFD	Computational Fluid Dynamics
CFL3D	High-level computational fluid dynamics code by NASA (Ref 19)
CPU	Computational Processing Unit
DLM	NASTRAN's code to generate steady/unsteady subsonic aerodynamics based on a doublet lattice method.
DMAP	Direct Matrix Abstraction Program
DMS	Data Mining System
FEM	Finite Element Model
GUI	Graphical User Interface
LCO	Limit Cycle Oscillation
MATLAB	Matrix Laboratory (An interactive system and programming language for general scientific and technical computation.)
MSM	Massive Store Management
NASTRAN	Structural FEM software product of MSC

PVM	Parallel Virtual Machine
RAFEL	Rapid Assessment of Flutter / Ejection Load
SDG	Store Database Generator
UAIC	Unified Aerodynamic Influence Coefficient
ZAERO	ZONA's aeroelasticity and unstable aerodynamic software system covering all Mach ranges including ZONA6, ZONA7, ZTAIC and ZONA7U for complex aircraft configuration with external stores (Ref 6-10)
ZDM	ZONA Dynamic Module
ZONA	ZONA Technology, Inc.
ZONA51	ZONA's code implemented in NASTRAN to generate steady/unsteady supersonic aerodynamics for complex aircraft configuration with external stores (Ref 4). Capable to handle only flat type configuration.
ZONA6	ZONA's code to generate steady/unsteady subsonic aerodynamics for complex aircraft configuration with external stores (Ref 6)
ZONA7	ZONA's code to generate steady/unsteady supersonic aerodynamics for complex aircraft configuration with external stores (Ref 7)
ZONA7U	ZONA's code to generate steady/unsteady unified hypersonic and supersonic aerodynamics for wing-body/aircraft configurations with external stores(Ref 8)
ZTAIC	ZONA's Transonic Aerodynamic Influence Coefficient code; Generates unsteady transonic aerodynamics for complex aircraft configuration (Ref 7)

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## SECTION 1

### INTRODUCTION

This final technical report describes the work performed by ZONA Technology, Inc. (ZONA) under an SBIR Phase I contract FO8635-01-C-0049, entitled "*A Comprehensive Rapid-Assessment-of-Flutter/ Ejection-Loads (RAFEL) Software System for Aircraft /Store Compatibility*".

The overall Phase I technical objective is to develop an accurate and computationally efficient software system for the aeroelastic solutions of massive number of aircraft/store configurations.

The F16 is selected as a baseline aircraft with the following specific objectives:

1. Investigate the accuracy of ZONA's Aeroelastic Software System (ZAERO) to predict aeroelastic instability of the F-16 aircraft with multiple stores for subsonic, transonic and supersonic Mach number.
2. Investigate the capability of ZAERO to differentiate various types of aircraft/store aeroelastic instability behavior including classical flutter, typical limit cycle oscillation (LCO) and non-typical LCO.
3. Validate the accuracy of ZAERO aeroelastic system with the flight test data of three proposed F-16/store configurations (Table 1.1).
4. Using ZAERO as the basic software system, design a *Massive Store Management (MSM)* system that can substantially increase the computational efficiency of ZAERO.

In this Phase I effort, we have accomplished the following:

- Performed aeroelastic instability computation using ZAERO for a number of F-16 aircraft in subsonic, transonic and supersonic flight regimes and at various altitudes.
- Investigated the influence of various store aerodynamic models including underwing/tip launchers, weapons and fuel tank aerodynamic model to the aeroelastic behavior of the whole aircraft/store configurations.
- Investigated the influence of aircraft rigid body modes to the aeroelastic instability of various aircraft/stores configurations.
- Investigated the capability of linear and nonlinear unsteady aerodynamic procedures of ZAERO to differentiate various aeroelastic instability behavior including classical flutter, typical limit cycle oscillation (LCO) and non-typical LCO of F-16 aircraft with multiple stores.
- Investigated the correlation between the flight test data of the three proposed F-16/store configurations and the aeroelastic response computed using ZAERO.
- Designed the Massive Store Management (MSM) system as a platform to the rapid aeroelastic prediction (RAFEL) scheme based on the ZAERO aeroelastic system for the assessment of flutter/LCO of massive aircraft/store configurations.

To validate the accuracy of the present procedure, three configurations of F-16A Block 15 given in Reference 1 are selected and shown in the following Table.

**Table 1.1 F-16A Store Configurations.**

Sta. No.	Aeroelastic Response Type		
	Case 1 Classical Flutter	Case 2 Typical LCO	Case 3 Non-typical LCO
1	LAU-129/A launcher	LAU-129/A launcher	16S210 launcher
2	Empty Station	LAU-129/A launcher AIM-9L missile	LAU-129/A launcher AIM-9L missile
3	Launcher/pylon Air-surface missile	Launcher/pylon Air-surface missile	Launcher/pylon AIM-120A missile
4	Empty Station	Pylon 370-gal fuel tank (empty)	Pylon 370-gal fuel tank (empty)
Front View	<p>STATION NO. 1 3 2 1 Air-Surface Missile</p>	<p>STATION NO. 4 3 2 1 370 TK (EEE)</p>	<p>STATION NO. 4 3 2 1 370 TK (EEE)</p>

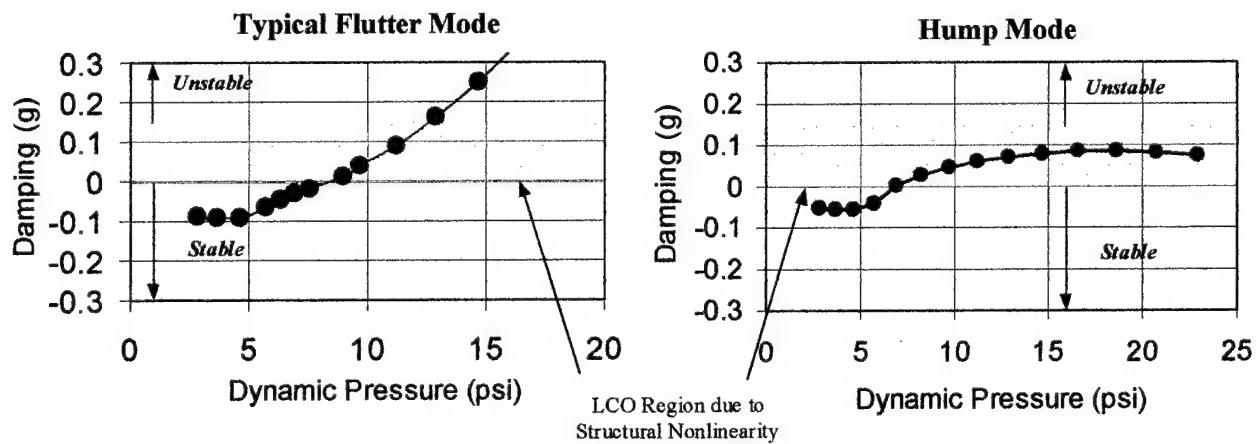
## 1.1 Background

Flutter clearance of a modern fighter aircraft with massive store/weapon configuration is a major engineering task in aircraft/store weapon compatibility. This task requires expedient and yet accurate solutions in a short-time framed demanded by rapid military responses when facing today's ever-changing international situation. Since there can be more than 400,000 store/weapon combinations for a typical fighter aircraft, the flutter clearance for such configuration requires not only the solution accuracy but also computational efficiency to rapidly identify the critical cases. The procedure is needed also to identify a wide variety of aeroelastic response characteristics including flutter, divergence and limit cycle oscillation.

## 1.2 Limit Cycle Oscillation (LCO) of Wing with External Stores

Limit Cycle Oscillation (LCO) has been a persistent problem on several current fighter aircrafts and is generally encountered with external store configurations. Denegri (Ref 2) provided a detailed description of the aircraft/store LCO phenomenon. Norton (Ref 3) gave an excellent overview of LCO of fighter aircraft carrying external stores and its sensitivity to store carriage configuration and mass properties.

LCO can be characterized as sustained periodic oscillations which neither increase nor decrease in amplitude over time for a given flight condition. Using a refined aerodynamic model of the aircraft and stores, ZONA (Chen, Sarhaddi and Liu – Ref 4) has shown that wing/store LCO is a post-flutter phenomenon whenever the flutter mode contains low unstable damping. This type of flutter mode is called “*hump mode*”. Since the aircraft structure usually contains structural nonlinearity such as friction damping, this amplitude-dependent friction damping can stop the growth of amplitude (due to flutter), thus the structural system would result in steady-state oscillation. This is known as LCO. By contrast, a typical flutter mode is a result of growth of amplitude largely due to destabilizing negative aerodynamic damping, hence a drastic increase in damping beyond the neutral stability point, or the flutter point ( $g = 0$ ). A typical flutter mode and hump mode are shown in Figure 1.1.



**Figure 1.1 Typical Flutter Mode and Hump Mode by Flutter Analysis**

Admitting nonlinear friction damping, Denegri (Ref 5) also showed consistent trends that hump mode can be used to correlate the flutter solutions with LCO flight test data of F-16's. Since the structural characteristic varies for different aircraft/store configurations, it is unlikely that the fixed-gain type of control system would work for wing/store LCO suppression in general. It appears that an adaptive controller with an online system identification process would be most appropriate for LCO suppression of a wide range of aircraft/store configurations.

### 1.3 Technical Issues and Challenges

Rapid assessment of flutter/LCO of aircraft with multiple stores presents challenging problems to be resolved. Several pertinent technical issues are addressed as follows.

- *Solution Accuracy Including Algorithm Robustness, Modeling Fidelity, and Extended Flight Regimes*

Current engineering analysis enjoys sufficient accuracy provided by the structural finite element (FEM) methodology. But a compatible level of accuracy provided by unsteady

aerodynamics for flutter/ejection loads is lacking. This calls for an unsteady aerodynamic method that can deal with complex configurations such as a whole aircraft with external stores in all flight regimes including subsonic, transonic and supersonic Mach numbers, and with sufficient solution accuracy.

- *Computational Efficiency for Massive Store/Aircraft Combinations*

CFD has become an accurate tool for aerodynamic analysis/design. Recognized by experienced aeroelasticians, however, unsteady CFD is far from being an efficient tool for aircraft aeroelastic analysis, let alone for the massive store/aircraft aeroelastic requirement. Using the CFL3D code (Ref 2), ZONA's recent study shows that it requires 4 days of computing time to complete a transonic LCO study on a 1 GHz computer of a two-dimensional (2-D) airfoil (Ref 3). The requirement to process 2000 flutter configurations in two weeks is a stringent one. Since unsteady CFD is out of the question, one resorts to the well-practiced unsteady-aerodynamics computational procedure called AIC (Aerodynamic Influence Coefficient) matrix. The merit of AIC matrix is that it will provide the corresponding unsteady aerodynamics (in frequency domain) to a fixed aerodynamic configuration, but can couple with alternative structural arrangements. The AIC, and hence the unsteady aerodynamics, is computed once and for all and can be re-used for repetitive aeroelastic computations. For slightly different aerodynamic configurations such as the same aircraft with different stores, only a small subset (sub-matrix) of the AIC matrix needs to be regenerated.

- *Rapid Selection for Critical Flutter, LCO and Ejection Loads*

This calls for an automated *data mining system* that can search for and identify the critical flutter, LCO and ejection loads through the data set generated by massive flutter/ejection load analyses. In addition, this data mining system must be able to recognize an LCO case from the flutter-solution cases, to identify the severity of the flutter instability, to compute the sensitivity of the flutter/LCO to the change of flight speed, and to provide recommendations regarding the need of additional flight test to confirm the software predictions.

#### **1.4. Overall Design Strategy**

It appears that the newly released ZAERO aeroelastic software system is a viable methodology to answer all the above technical challenges. ZAERO is a comprehensive aeroelastic software system which contains over a dozen modules for arbitrary aircraft configurations with complex store/weapon combination. Application of ZAERO for the rapid assessment of the aircraft/store aeroelastic instability can be constructed based on the following two parts:

- *The off-line analysis.* In this stage, the most time consuming computation of the unsteady aerodynamic and structural finite element data base of the aircraft/store are generated. Only the portion invariant to the changes in the store configuration is generated. For a typical flutter calculation of the aircraft/store, the invariant portion of the aerodynamic data base can be as large as 95% ~ 99% of the total aerodynamic data required. This off-line analysis stage

- can be performed independent of any store configuration. The generation of the database in the off line analysis clearly will reduce the computational time significantly.
- *The on-line analysis.* In this stage only small portion of the calculation is needed to generate the aerodynamic data associated with the variation of the store configurations.

## 1.5 Required Software Tools

Two engineering disciplines in terms of software tools are employed for the present study, namely MSC/NASTRAN and ZAERO. MSC/NASTRAN is used to perform the structural finite element (FEM) analysis and to generate the generalized mass and stiffness matrices as well as mode shapes of the aircraft structure. ZAERO is ZONA's commercialized aeroelastic software system that integrates the essential disciplines required by aeroelastic and aeroservoelastic design/analysis.

## SECTION 2

### COMPREHENSIVE RAPID-ASSESSMENT-OF- FLUTTER/EJECTION-LOADS (RAFEL) SOFTWARE SYSTEM

The RAFEL software system consists of three sub-systems: an invariant unified aerodynamic influence coefficient (UAIC) submatrix generation system, a Massive Store Management (MSM) system, and a data mining system. The core of the RAFEL system is the ZAERO aeroelastic system which is used as a tool to generate the AIC matrix and solve the aeroelastic system of equations. A detailed description of ZAERO is presented first in the next section, followed by the application of ZAERO in the RAFEL system.

#### 2.1 ZAERO – An Engineer’s Toolkit for Aeroelastic Solutions

ZAERO is ZONA’s aeroelastic software system that integrates the essential disciplines required by aeroelastic and aeroservoelastic design/analysis (Ref 17). Figure 2.1 illustrates six essential modules in ZAERO that consist of five engineering modules namely the Unified AIC (UAIC), 3-D spline, flutter, aeroservoelasticity (ASE) and transient loads modules and a memory and database management system called the ZDM module.

The functionality of the ZDM (ZONA Dynamic Memory and Database Management System) module is equivalent to the DMAP/GINO system of MSC/NASTRAN. The entire ZAERO program architecture is developed based on the ZDM module that controls the input/output data entities of all engineering modules. The ZDM module will also serve as a basic database system for the development of the proposed massive-store management system. Throughout the years, all of the ZAERO modules have been continuously validated by many test cases ranging from the verification with exact solutions for simple geometries to the comparison with experimental or CFD data for complex configurations. The main features of these five modules now follow.

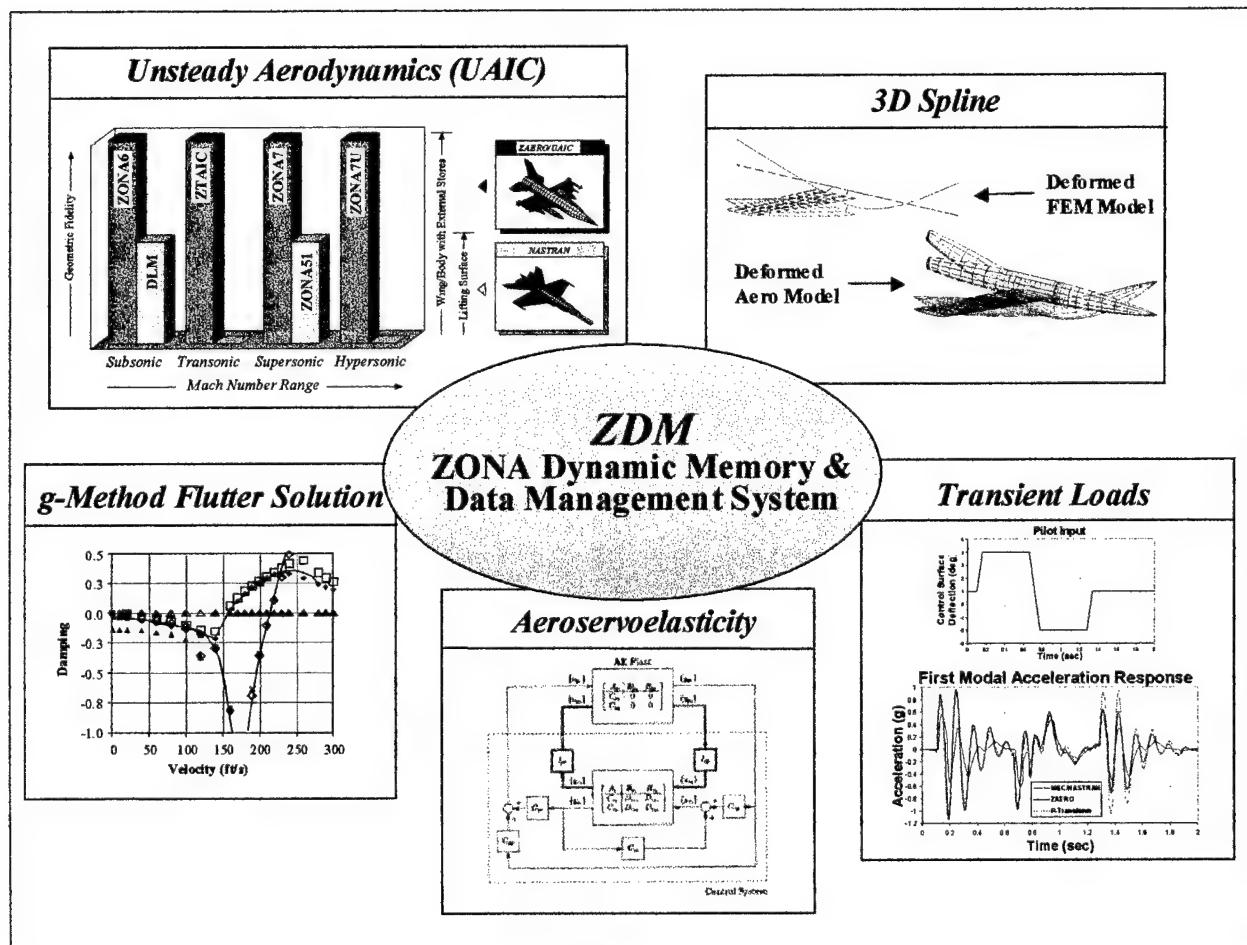
#### The UAIC Module

The UAIC module shown in Figure 2.1 consists of four unsteady aerodynamic methods, namely ZONA6, ZTAIC, ZONA7 and ZONA7U, which jointly provide a Unified Aerodynamic Influence Coefficient (UAIC) matrix covering all Mach numbers for complex aircraft/store configurations. By contrast, MSC/NASTRAN contains only the DLM method for subsonic flows and the ZONA51 method for supersonic flow and can only handle flat-plate type configurations. Note that ZONA51 method (Ref 4) in MSC/NASTRAN is a ZONA software product for supersonic lifting surface unsteady aerodynamics that has been integrated into the aeroelastic option of MSC/NASTRAN since 1990. Today, ZONA51 has become the industrial standard method for supersonic lifting surface unsteady aerodynamics with over 120 users worldwide. The features of these four unsteady aerodynamic methods in the UAIC module are:

- ZONA6 (Ref 5): generates steady/unsteady subsonic aerodynamics for wing-body/aircraft configurations with external stores/nacelles including body wake effects.
- ZTAIC (Ref 6): generates unsteady transonic (modal) AIC’s using externally-provided steady mean pressures.

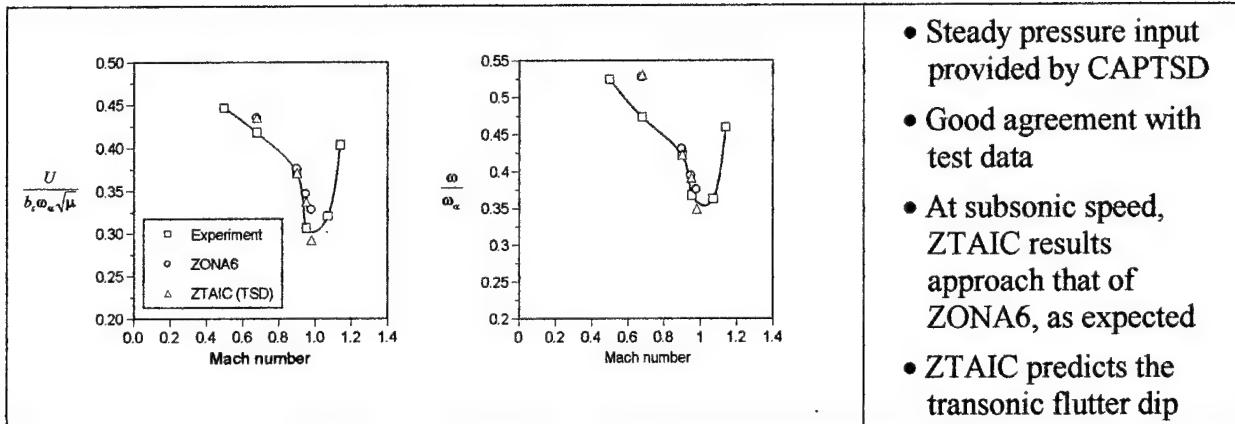
- ZONA7 (Ref 7): generates steady/unsteady supersonic aerodynamics for wing-body/aircraft configurations with external stores/nacelles (formerly ZONA51 for lifting surfaces).
- ZONA7U (Ref 8): generates steady/unsteady unified hypersonic and supersonic aerodynamics for wing-body/aircraft configurations with external stores/nacelles.

Among these four methods, the transonic code ZTAIC is capable of predicting the “*transonic dip*” associated with flutter boundary of fighters. While using steady pressure input (provided by measurements or a CFD Navier-Stokes Solver), the ZTAIC method solves the transonic small disturbance equation for unsteady aerodynamics. Unlike typical CFD methods, ZTAIC does not require grid generation. Because of the accurate steady pressure input, the correct unsteady shock location and strength computed by ZTAIC are ensured. This can be seen by the excellent correlation between ZTAIC prediction and wind tunnel test data of the AGARD 445.6 transonic flutter boundary (Figure 2.2) and the unsteady pressure distribution of the oscillating Lessing wing (Figure 2.3).

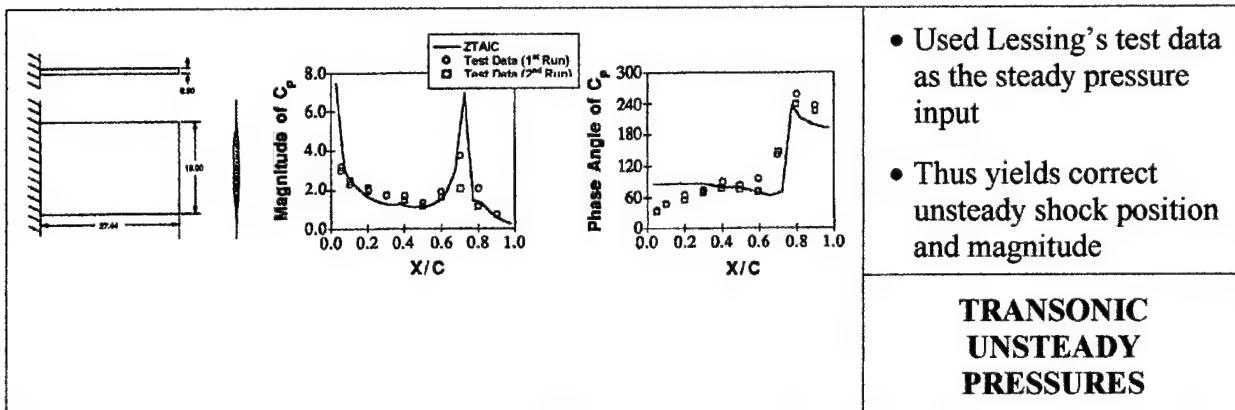


**Figure 2.1 Six Essential Modules in ZAERO.**

As discussed earlier, due to the pure-aerodynamic characteristics of the AIC matrix, the UAIC matrices generated by the UAIC module can repeatedly be used when changes in different structural properties or slightly different aerodynamic configurations are needed in aeroelastic analysis/design. This renders ZAERO a computationally efficient tool for massive flutter analysis.



**Figure 2.2 AGARD Standard 445.6 Wing.**



**Figure 2.3 Lessing Wing in First-Bending Oscillation ( $M=0.9$ ,  $k=0.13$ ,  $\eta=0.5 \times \text{span}$ ).**

### The 3-D Spline Module

For low fidelity unsteady aerodynamic methods like DLM, the Infinite Plate Spline (IPS, Ref 9) is sufficient for the transferal of data between the structural and aerodynamic models. To perform the data transferal for high fidelity modeling of an entire aircraft/store configuration requires a 3-D spline capability. The 3-D spline module of ZAERO is equipped with an improved 3-D Thin Plate Spline (TPS, Ref 10) method that provides the displacements and loads in six degrees of freedom at each structural and aerodynamic grid point. The 3-D spline module can also be used to generate a deformed aerodynamic model to verify the spline input by graphical visualization. A typical graphical display of a deformed wing-body configuration is shown in the 3-D spline module diagram of Figure 2.1.

## The Flutter Module/g-Method

The flutter module consists of two flutter solution techniques; *the K-method* and *the g-method*. The g-method is a ZONA's newly developed flutter solution method (Ref 11) that generalizes the K-method and the P-K method for true damping prediction. The g-method is superior to the P-K method by the following merits.

### - True Damping Prediction

The theoretical foundation of the true-damping prediction capability of the g-method is based on the inclusion of a first-order aerodynamic damping term in the flutter equation that is rigorously derived from the Laplace domain aerodynamics. Such a true-damping prediction capability is lacking in the K-method and P-K method.

### - Solution Robustness: *the g-Method*

The g-method utilizes a reduced frequency sweep technique to search for the roots of the flutter equation and a predictor-corrector scheme to ensure the robustness of the sweep technique. The P-K method typically requires an iterative procedure for flutter solutions and occasionally suffers from a solution breakdown. By contrast, the g-method's sweep technique is proven to be efficient and robust and can obtain an unlimited number of aerodynamic lag roots. The inclusion of aerodynamic lag roots can provide important physical insight of the flutter solutions.

### - Match-Point Flutter Solutions

The generalized formulation of the g-method (as opposed to the K-method and the P-K method) provides an automated matching feature of the flutter solution that satisfies the Mach number-velocity-density relations of a given atmospheric table.

Therefore, with the g-method built in, the flutter module in ZAERO can further be developed as an effective *data mining system* to search for critical flutter, LCO and ejection load cases. This is attributable to:

- Its true damping prediction can accurately identify the severity and sensitivity of the flutter instability. With a nonlinear structural damping criteria which will be shown in the later section, the g-method solution can be used to recognize an LCO case from the flutter-solution cases.
- Its match-point flutter solution feature avoids an additional iterative procedure between the densities and velocities which is normally required by a non-match-point flutter solution procedure. Therefore, the match-point flutter solution can be directly correlated with flight test data.
- Its reduced frequency sweep technique can ensure the robustness of an automated data mining system which would not work with an unreliable P-K method.

In addition, the ZAERO/flutter module has an existing capability for rapid flutter solutions of aircraft with different inertial properties (for instance, the fuel weight variations). This capability utilizes a so-called "mass increment technique" which perturbs the following flutter equation with incremental mass  $\Delta M$ , i.e.

$$\phi^T (M + \Delta M) \phi \ddot{q} + \phi^T k \phi q = q_\infty Q(ik) q \quad (2.1)$$

where:

$\phi^T M \phi$  and  $\phi^T k \phi$  are the generalized mass and stiffness matrices, respectively, of the baseline aircraft.

$q_\infty Q(ik)$  is the generalized aerodynamic force,  $q$  is the generalized modal coordinate,  $\phi$  is the mode shapes of the baseline aircraft, and

$\Delta M$  is the incremental mass added to (or subtracted from) the baseline aircraft, e.g., increase (or decrease) of fuel in the tank.

The validity of Eq (2.1) lies in the fact that the flutter mode of the aircraft with the incremental mass can be expressed by the mode shapes of the baseline aircraft (without incremental mass) if a sufficient number of modes are used. This also implies that solving Eq (2.1) does not require additional FEM and unsteady aerodynamic analysis because all matrices in Eq (2.1) remain unchanged except  $\Delta M$ , an input parameter.

Some ZAERO users have adopted the mass increment technique to accelerate the massive store screening process by also ignoring underwing store aerodynamics. In this way, a very fast procedure results for flutter solution generation of thousands of store configurations by using only one set of AIC and FEM solutions. This procedure can be used as a preliminary step to compliment the MSM procedure for rapid screening of critical flutter cases. ZONA has implemented this procedure as an option in the RAFEL system.

## 2.2 Application of ZAERO to RAFEL Software System

The RAFEL software system consists of three sub-systems: an invariant unified aerodynamic influence coefficient (UAIC) submatrix generation system, a Massive Store Management (MSM) system and a data mining system.

### 2.2.1 Invariant UAIC Submatrices for Store/Aircraft Configurations

The unified Mach number Aerodynamic Influence Coefficient (UAIC) matrix generated by the ZAERO/UAIC module is a pure aerodynamic entity and is independent of the structural properties. For a given aircraft with multiple stores, this UAIC (at a given Mach number and reduced frequency pair) can be partitioned into five different kinds of submatrices, i.e.

$$[UAIC] = \begin{bmatrix} A_{aa} & A_{s_1a} & & A_{s_i a} \\ \hline A_{as_1} & A_{s_1 s_1} & & A_{s_i s_1} \\ \hline & & \ddots & \\ \hline A_{as_i} & A_{s_1 s_i} & & A_{s_i s_i} \end{bmatrix} \quad (2.2)$$

$A_{aa}$  is the aircraft-to-aircraft aerodynamic submatrix

$A_{s_i s_i}$  is the  $i^{\text{th}}$  store-to-  $i^{\text{th}}$  store aerodynamic submatrix

$A_{s_i a}$  is the  $i^{\text{th}}$  store-to-aircraft aerodynamic submatrix

$A_{as_i}$  is the aircraft-to-  $i^{\text{th}}$  store aerodynamic submatrix, and

$A_{s_i s_j}$  and  $A_{s_j s_i}$ , where  $i \neq j$ , represents the store-to-store aerodynamic submatrix between each two different stores.

The only submatrices in Eq (2.2) that need to be newly computed are the store-to-store submatrices (shaded areas in Eq 2.2)  $A_{s_i s_j}$  and  $A_{s_j s_i}$ , where  $i \neq j$ . Clearly, the self-influence submatrices  $A_{aa}$  and  $A_{s_i s_i}$  shown above are invariant as long as their own aerodynamic shapes remain the same. For a given type of store designated to a fixed weapon-carriage station, it can be seen that  $A_{s_i a}$  and  $A_{as_i}$  are also invariant since the store-carriage stations with respect to a designated aircraft remain fixed. This implies that the submatrices  $A_{aa}$ ,  $A_{s_i s_i}$ ,  $A_{s_i a}$ , and  $A_{as_i}$  can be pre-computed and saved in a database. For a given new store arrangement, these submatrices need not be re-computed, rather they can be retrieved from the database. In so doing, the computing effort of the total UAIC matrix generation can be substantially reduced. In fact, the proposed Massive Store Management (MSM) software system is constructed according to this proposed procedure which will be discussed in the next section.

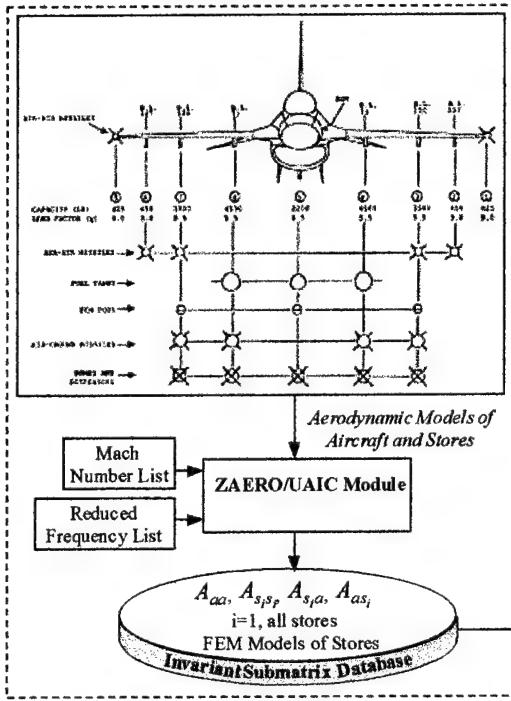
### 2.2.2 The Total RAFEL Software Architecture

Figure 2.4 depicts the total software system architecture for massive flutter, LCO, ejection load analysis and the critical case selection. This software system consists of three subsystems: an invariant UAIC submatrix generation system, a Massive Store Management (MSM) software system, and a data mining system.

#### Invariant UAIC Submatrix Generation System

The functionality of this system is to generate the  $A_{aa}$ ,  $A_{s_i s_i}$ ,  $A_{s_i a}$ , and  $A_{as_i}$  invariant UAIC submatrices, where  $i = 1, \dots, n$ , and  $n$  represents the number of all available stores with their associated weapon-carriage stations. The generation of these invariant submatrices is based on the assumption that the designated aircraft has fixed weapon-carriage stations. For instance, the F-16 aircraft shown in Part 1 of Figure 2.4 has 9 weapon-carriage stations. Every station has a set of candidate stores to be carried.

### PART 1: Invariant UAIC Submatrix Generation System



Invariant Submatrix Generation of All Available Stores – Computed Once and for All

### PART 2: Massive Store Management System

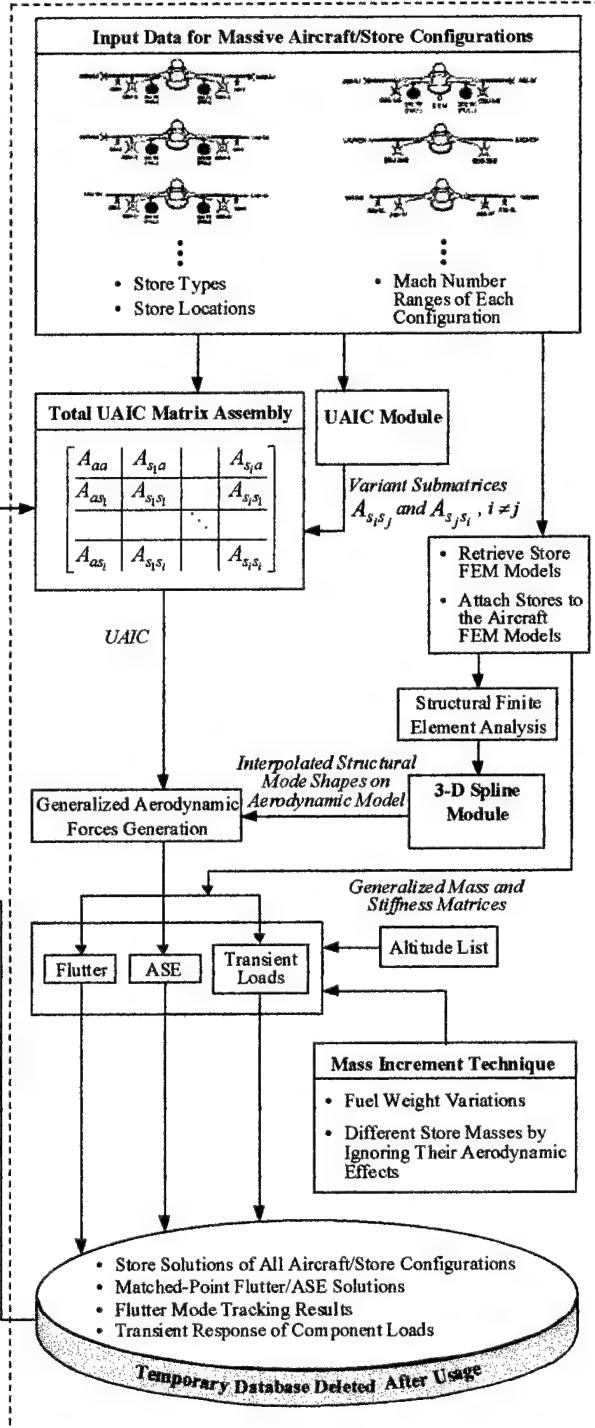


Figure 2.4 The Total RAFEL Software Architecture.

To design the invariant UAIC submatrix generation system, we first provide each store a label called the “*store label*” which marks the store and its designated weapon-carriage station. Note that a different store label is assigned for the same store located at different stations. Next, the

ZAERO/UAIC module is employed to generate the UAIC submatrices  $A_{s_i s_j}$ ,  $A_{s_i a}$  and  $A_{as_i}$  of all stores and save these submatrices in a database. Because the aircraft-to-aircraft submatrix  $A_{aa}$  is independent of stores, it only needs to be computed once. Note that each of the invariant matrix is also a function of Mach number and reduced frequency. These Mach numbers and reduced frequencies can be pre-selected according to the flight envelope of the designated aircraft and its structural characteristics. Clearly, to generate the above database that contains the invariant submatrices of all stores requires a large computing time. However, since these submatrices are computed once and for all, this long computing time should be considered as off-line data preparation and hence should not influence the efficiency of the subsequent massive store/aircraft aeroelastic analysis. Of course, if a new store is added to the list, its associated submatrices need to be newly computed in this manner and added to the database.

### **Massive Store Management System**

The Massive Store Management (MSM) system is essentially a database management system for the total UAIC matrix assembly. For a given aircraft with multiple store configuration, the MSM system first retrieves the invariant submatrices from the database. Next, it activates the ZAERO/UAIC module to compute all variant submatrices. Finally, it assembles the invariant and variant submatrices together and generates the total UAIC matrix. Once the total UAIC matrix is obtained, the remaining tasks for an aeroelastic analysis are performed by the existing ZAERO engineering modules, as shown in Part 2 of Figure 2.4.

The 3-D spline module reads the output of the structural finite element analysis of the given aircraft/store configuration and computes the interpolated mode shapes on the aerodynamic model. Once these mode shapes and the total UAIC matrix are available, the generalized aerodynamic force matrices can be obtained immediately for an aeroelastic analysis, i.e. flutter, ASE or transient load analysis. This analysis is performed at various altitudes, and the solution at every Mach number and altitude pair is a matched-point solution.

It should be noted that the MSM system is a fully automated process. For a given aircraft/store configuration, the input of the MSM system (*e.g.*, the one shown in Part 2 of Figure 2.4) is the store label of each store and the Mach number range of interest. Since this constitutes a small amount of input, it takes little effort to set up an input file for a massive number of aircraft/store configurations. The MSM system continuously processes each configuration and stores its aeroelastic solutions on a temporary database. Thus, once the MSM system is activated, manual interaction from the engineer is no longer required.

### **Data Mining System**

The main objective of the data mining system is to rapidly screen through the temporary database generated by the MSM system and to select the critical flutter, ASE, or ejection load cases for output display. The inputs of the critical flutter/ASE cases are the assumed structural damping levels that define three stability regions, namely the stable region, the LCO region, and the flutter region. The data mining system screens through all the damping solutions at every Mach number and altitude (M-h) pair for a particular aircraft/store configuration. If the damping

solutions at all M-h pairs are below the stable region, this configuration is classified as non-critical configuration and no output is displayed. If the damping solutions are above the stable region, a three-axis graphical file is generated which can display the damping solutions vs. Mach numbers and altitudes, as the one shown in Part 3 of Figure 2.4. The regions in the graphical display where the damping solutions exceed the LCO region are highlighted. A similar display for the frequency solution is also generated. It should be noted that since all flutter results generated by the g-method and the ASE analysis are matched-point solutions with true damping values, these results can be directly correlated with the flight test data. The time history shown in Part 3 of Figure 2.4 is a typical output in terms of component loads of the ejection load analysis. Again, only those configurations whose transient loads exceed the specified allowable loads are displayed. The corresponding region which exceeds the allowable loads will also be highlighted in the display.

### **2.2.3 Store-Aircraft Finite Element Modal Analysis Adopting the MSM System**

To generate structural finite element models of massive number of aircraft/store configurations is a very time consuming task. However, the massive store management (MSM) system can be adopted to also automatically generate the finite element models. This is very similar to, but simpler than the UAIC matrix assembly process. While saving the UAIC submatrices, the finite element models of each store including the grid locations, connectivity and material properties are also saved on the database. For a given aircraft/store configuration, the MSM system retrieves all the store finite element models from the database and attaches them to the aircraft finite element model, then subsequently launches a finite element analysis. The output of this analysis will be directly imported to the ZAERO/3-D spline module for an aeroelastic analysis.

### **2.2.4 Design of a Database for the MSM System**

The ZAERO/ZDM module (ZONA Dynamic Memory and database management system) will be adopted as the basic database management system for the MSM system. Among many other features, the ZDM has two data entity managers that are especially important to the efficiency of the MSM system.

#### **Matrix Entity Manager**

The matrix entity manager is designed to store and retrieve very large, often sparse, matrices. It minimizes disk storage requirements while allowing algorithms to be developed that can perform matrix operations of virtually unlimited size.

#### **Relational Entity Manager**

Relational entities are essentially tables. Each relation has data stored in rows (called entries) and columns (called attributes). Each attribute is given a descriptive name, a data type, and constraints on the values that the attributes may assume (i.e., integer, real or character data). These definitions are referred to as the schema of the relation.

Clearly, the minimum disk storage capability of the matrix entity manager not only increases the efficiency of saving and retrieving matrices, but also reduces the required disk size of the computer.

The relational entity manager can be used as a file system manager. For instance, the "*store label*" can be defined as an attribute in a relational data entity. The data addresses in the database of the UAIC matrices and the finite element models can be stored in other attributes. Once the relational data entity is established, the data address of each store in the database can rapidly be located and subsequently retrieved by the matrix entity manager.

## SECTION 3

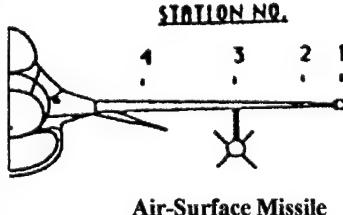
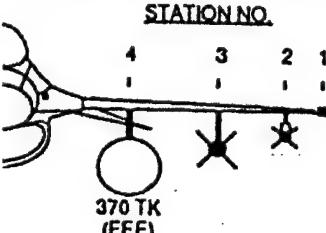
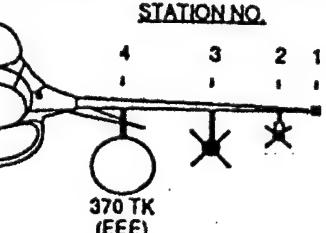
### SELECTED TEST CASE DATA

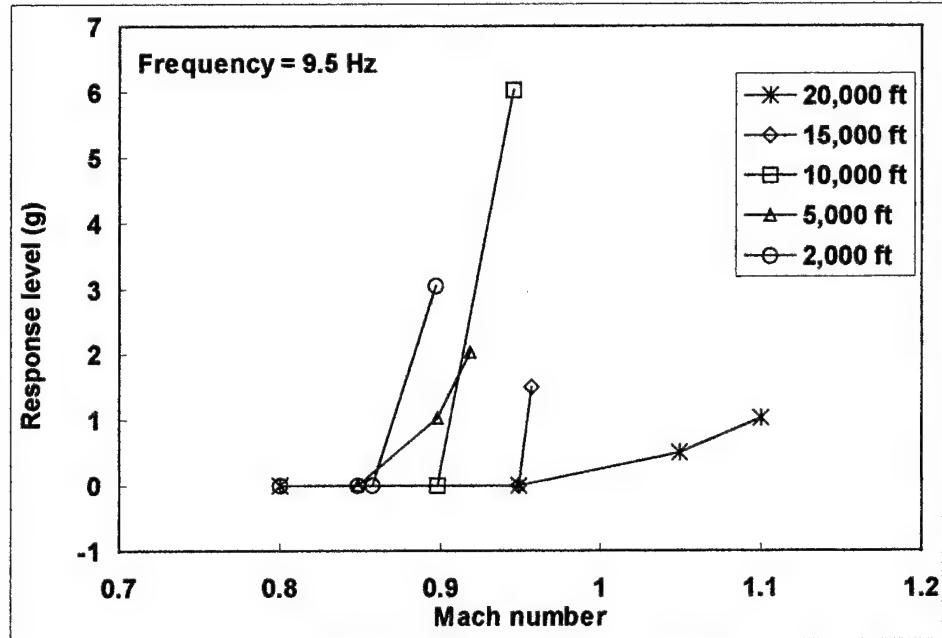
#### 3.1 Flight Test Data

Three F-16 with store configurations adopted from Ref 1 are selected as the test cases of the proposed software system. Reference 1 described that the aircraft is an F-16A, tail number 80-0573. This aircraft is a Block 15 F-16 modified for flutter testing. The store configurations and their associated F-16 weapon-carriage stations are presented in Table 3.1. A more detailed store mass properties and store attachment reference points are given in Tables 3.2 and 3.3. These data are taken from Ref 1 and used in the present work as the basis for modeling the structural finite element data and aerodynamic panel of the three configurations.

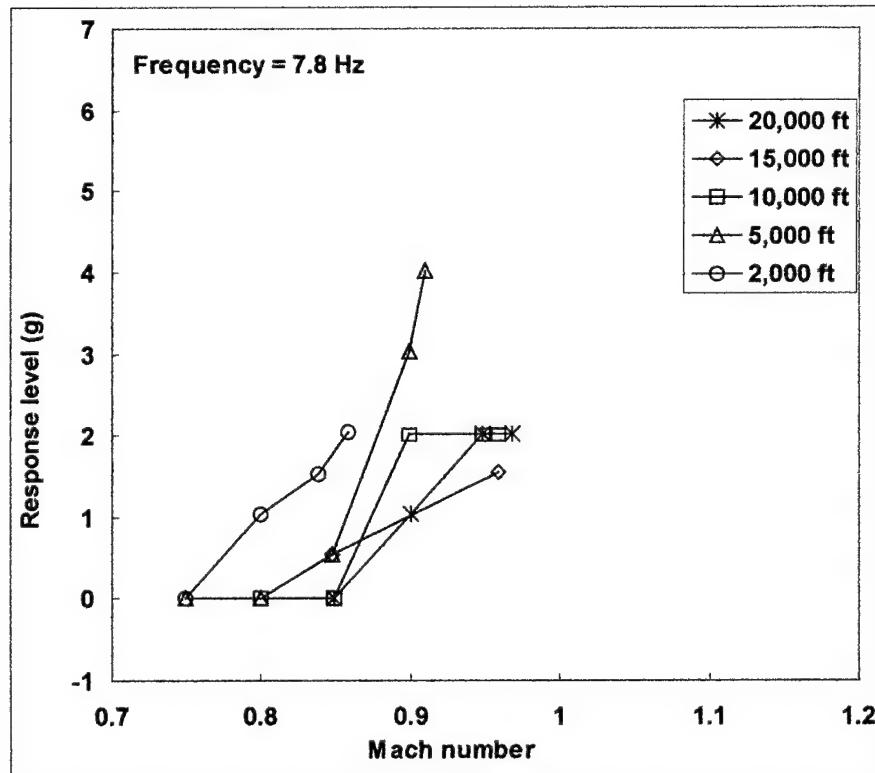
According to Ref 1, the three store configurations experienced different aeroelastic instabilities in flight tests; classified by Ref 1 as classical flutter, typical LCO and non-typical LCO. The measured flight test response for these cases are given in Figs 3.1-3.3. These data are also adopted from Ref 1 and used in the present work to correlate the numerical predictions with the flight test data. Because of their distinct aeroelastic instabilities, these three store configurations are the ideal test cases of the present procedure.

**Table 3.1 Store Configurations.**

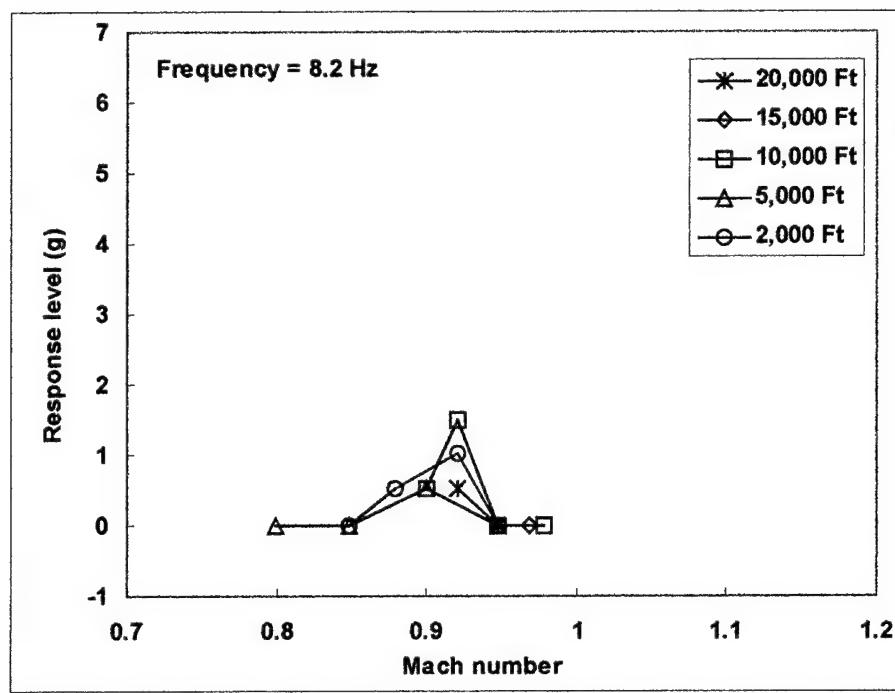
Sta. No.	Aeroelastic Response Type		
	Case 1 Classical Flutter	Case 2 Typical LCO	Case 3 Non-typical LCO
1	LAU-129/A launcher	LAU-129/A launcher	16S210 launcher
2	Empty Station	LAU-129/A launcher AIM-9L missile	LAU-129/A launcher AIM-9L missile
3	Launcher/pylon Air-surface missile	Launcher/pylon Air-surface missile	Launcher/pylon AIM-120A missile
4	Empty Station	Pylon 370-gal fuel tank (empty)	Pylon 370-gal fuel tank (empty)
Front View	 <p style="text-align: center;"><u>STATION NO.</u> 1      3      2      1 Air-Surface Missile</p>	 <p style="text-align: center;"><u>STATION NO.</u> 4      3      2      1 370 TK (EEE)</p>	 <p style="text-align: center;"><u>STATION NO.</u> 4      3      2      1 370 TK (EEE)</p>



**Figure 3.1 Measured Oscillatory Wingtip Response of Flight Test for Classical Flutter Configuration.**



**Figure 3.2 Measured Oscillatory Wing Tip Response of Flight Test for the Typical LCO Configuration.**



**Figure 3.3 Measured Oscillatory Wing Tip Response of Flight Test for the Non-Typical LCO Configuration.**

**Table 3.2 Store Mass Properties (Taken from Reference 1).**

Store	Weight (lbs)	Center of Gravity			Moment of Inertia, slug ft <sup>2</sup>		
		x, in	y, in	z, in	Roll	Pitch	Yaw
Air-surface missile	502.0	-14.58	0.00	-25.00	1.76	139.87	140.00
AIM-9L missile	200.0	-21.10	0.00	-17.50	0.42	51.00	51.00
AIM-120 missile	345.0	-14.73	0.00	-25.00	0.65	96.65	96.59
LAU-129/A wing tip launcher	88.0	-13.72	2.88	0.00	-	13.86	13.86
LAU-129/A underwing launcher	88.0	-13.72	0.00	-14.50	-	13.86	13.86
16S210 wingtip launcher	69.0	-15.28	3.60	0.00	-	11.68	11.68
Launcher/Pylon	138.0	-3.60	0.00	-11.00	1.46	14.35	13.55
370-gal fuel tank (empty)	438.5	-8.37	0.00	-18.22	17.12	176.11	165.69

**Table 3.3. Store Attachment Reference Points (Taken from Reference 1)**

Station	Location	Type	x, in	y, in	z, in
1	Wing Tip	Missile	380.46	180	0
2	Underwing	Missile	375.72	157	0
3	Underwing	Weapon	349.67	120	0
4	Underwing	Fuel Tank	325.40	71	0

### 3.2 Overall Computational Strategy

To investigate the influence of store configurations on the aeroelastic instability and, more importantly, to study the differences between the classical flutter, typical LCO and non-typical LCO, a number of aeroelastic instability analysis were conducted in the present work as follows:

- (1) Three structural finite element models of the F16/store as described in Table 3.1 are used.
- (2) For each of the three cases above, three aerodynamic models were used including the wing with tip launcher, the whole aircraft without store, and the whole aircraft with stores.
- (3) Two flutter calculation procedures were conducted using linear and nonlinear unsteady aerodynamic methods.
- (4) The calculations were performed to two structural dynamic models: the structural models with and without rigid body modes.
- (5) The flutter results were presented based on two structural damping assumptions :  $g = 0\%$  and  $g=1.0\%$ .
- (6) To investigate the correlation of the flutter calculations with the flight test data, the flutter results were presented for five altitudes, including sea level, 5 kft, 10 kft, 15 kft, and 20 kft.

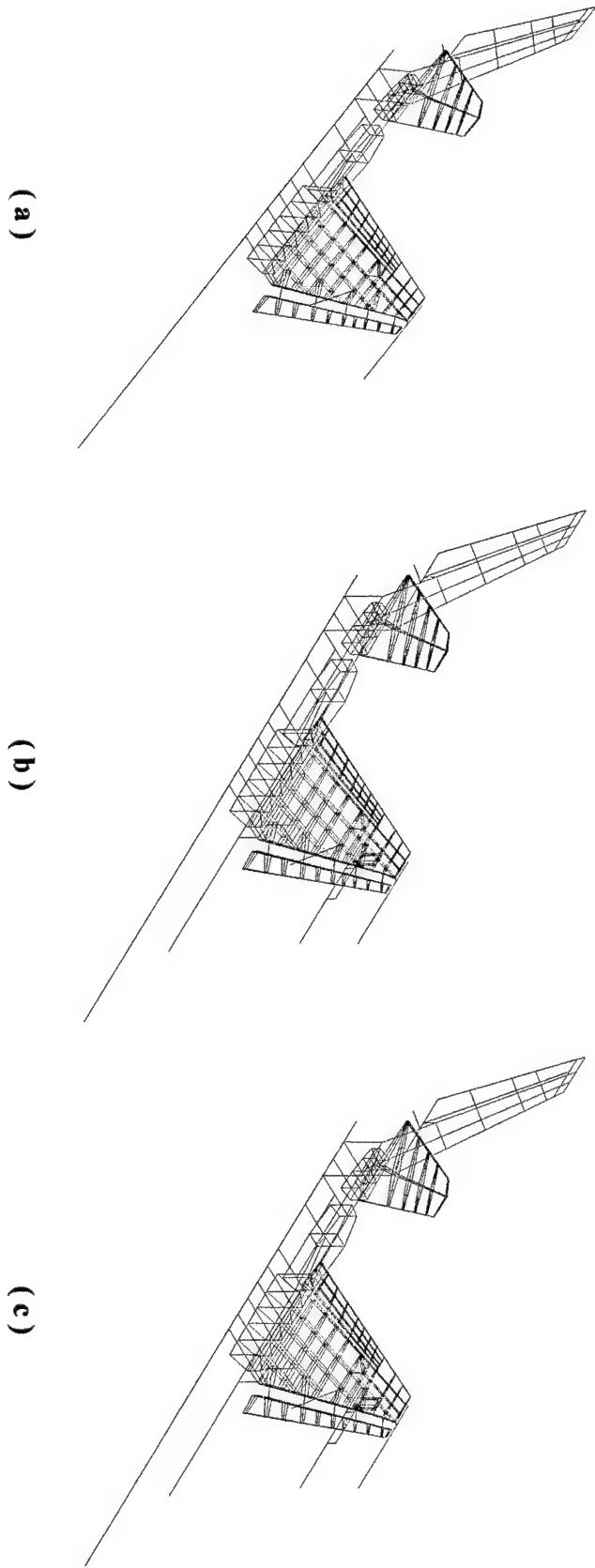
### 3.3 Structural Finite Element Data

The structural finite element model for each of the three cases is shown in Fig 3.4. Symmetric modes were not considered in the present analysis since it was known from the flight test results that the actual instability were anti-symmetric. However, the computational codes, including MSC/NASTRAN and ZAERO, are applicable to a more general case, *i.e.* symmetric, anti-symmetric and asymmetric configurations.

The natural frequencies for the whole aircraft with stores of each case are given in Table 3.2. The NASTRAN data needed to generate the natural frequencies and mode shapes are given in Appendices A, B, and C for the classical flutter, typical LCO and non-typical LCO cases, respectively. These natural frequencies and mode shapes are used in the present flutter/LCO predictions as described in the next three sections.

**Table 3.4 Natural Frequencies of F-16A (with Rigid Body Modes).**

Mode Shape	Natural frequency (Hz)		
	Case 1 Classical Flutter	Case 2 Typical LCO	Case 3 Non-typical LCO
1	0.0	0.0	0.0
2	0.0	0.0	0.0
3	0.0	0.0	0.0
4	9.01	7.74	8.16
5	9.91	8.10	8.36
6	12.03	9.77	10.71
7	12.20	10.93	11.58
8	13.61	11.97	12.60
9	15.69	12.42	13.99
10	17.41	13.74	14.84
11	20.71	15.19	15.52
12	29.59	17.23	17.70
13	29.76	19.53	19.90
14	33.94	22.19	22.44
15	36.45	24.00	23.93
16	39.68	26.09	26.60
17	41.79	29.75	29.96
18	44.05	30.55	31.72
19	44.92	31.58	32.36



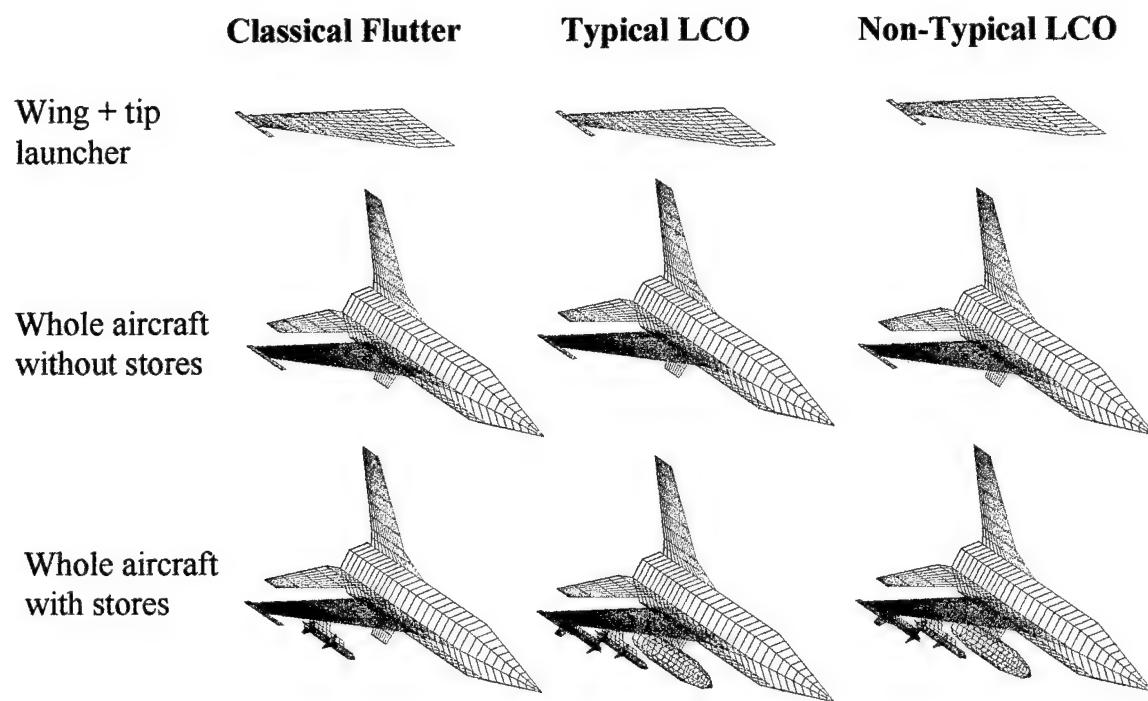
**Figure 3.4 Finite Element Model of F16A – (a) Classical Flutter Case (b) Typical LCO Case, (c) Non-typical LCO Case.**

### 3.4 Aerodynamic Model

Three aerodynamic models (Figure 3.5) are generated for each of the three F16/store configurations as follows:

- Model 1 : Wing with tip launcher only
- Model 2 : Whole aircraft without under stores
- Model 3 : Whole aircraft with stores.

The aerodynamic influence coefficient is calculated based on two different methods: linear and nonlinear unsteady aerodynamics. The linear aerodynamic methods are ZONA6 and ZONA7 for subsonic and supersonic flows, respectively. The nonlinear aerodynamic method is ZONA Transonic Aerodynamic Influence Coefficient (ZTAIC) method. These three aerodynamic codes are the essential parts of ZAERO to generate the AIC of the whole configurations, including fuselage, wing, empennage and stores.



**Figure 3.5 Aerodynamic Models of F-16/Store**

### 3.5 Steady Transonic Aerodynamic Data

The steady transonic aerodynamic data in the present work was supplied by Denegri of Eglin Air Force Base for five Mach numbers, including  $M = 0.8, 0.90, 0.95, 0.98$ , and  $1.05$ . The pressure distribution for the wing lower and upper surfaces of each Mach number are shown in Figure 3.6.

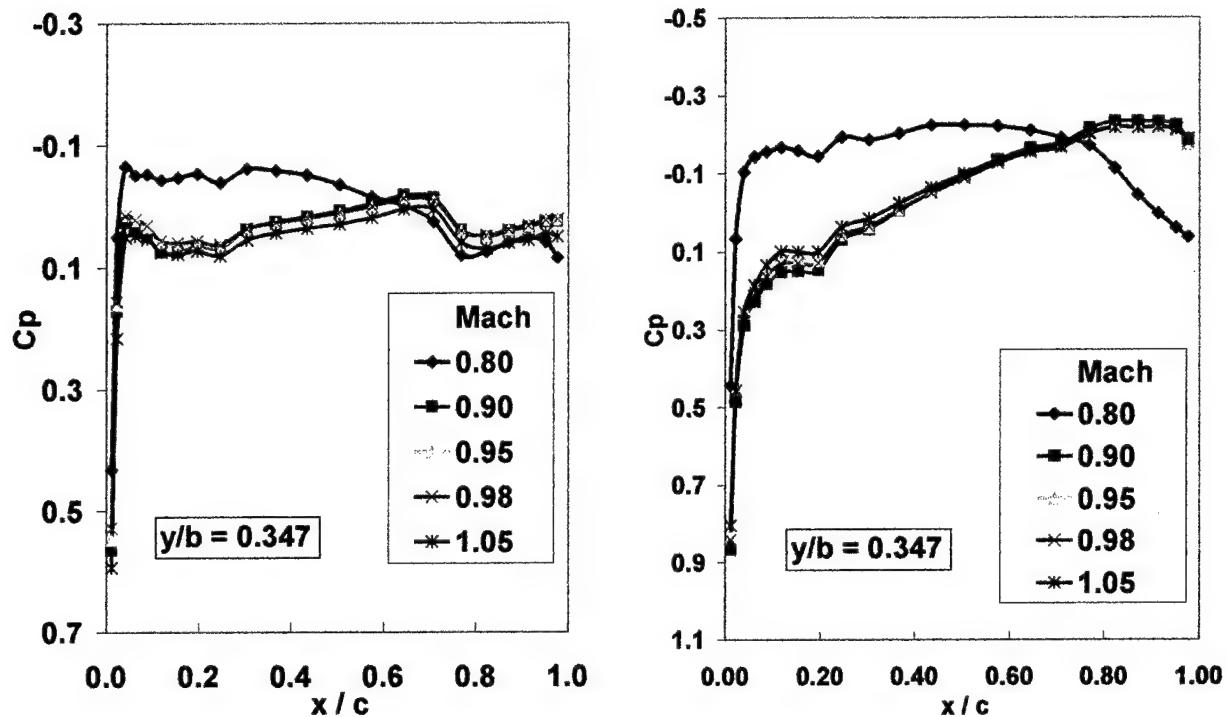


Figure 3.6a Cp Distribution at  $y = 0.347$  b.

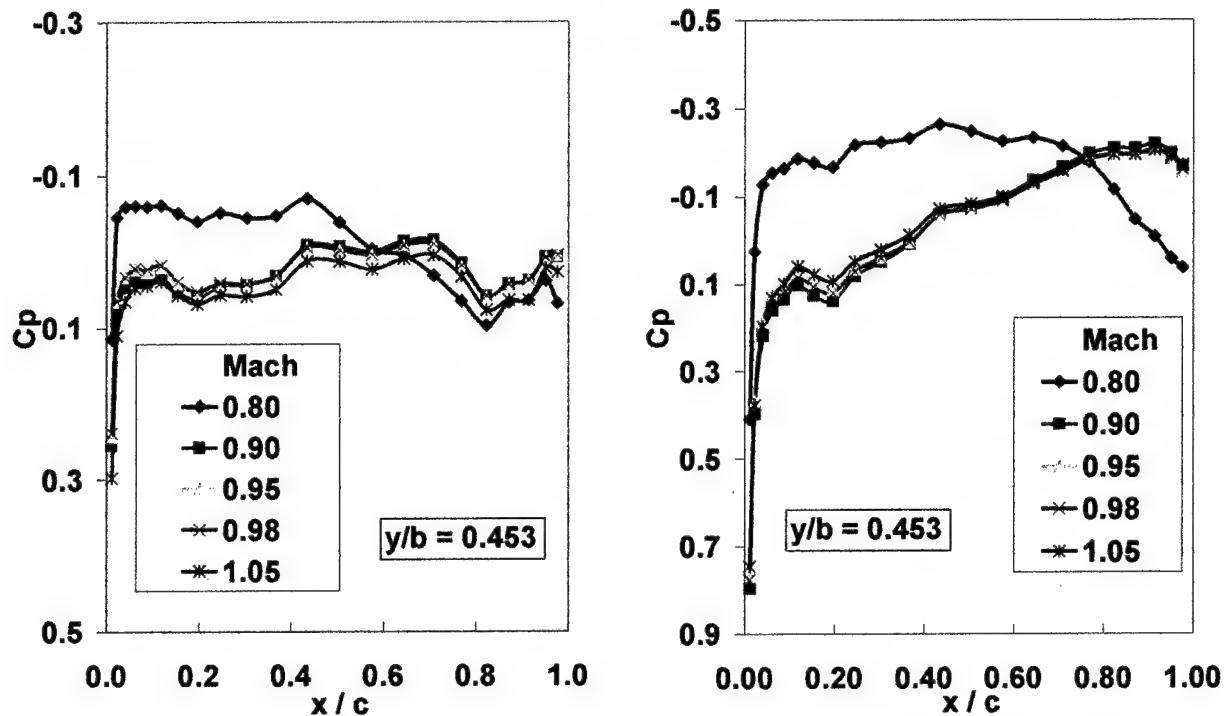


Figure 3.6b Cp Distribution at  $y = 0.453$  b.

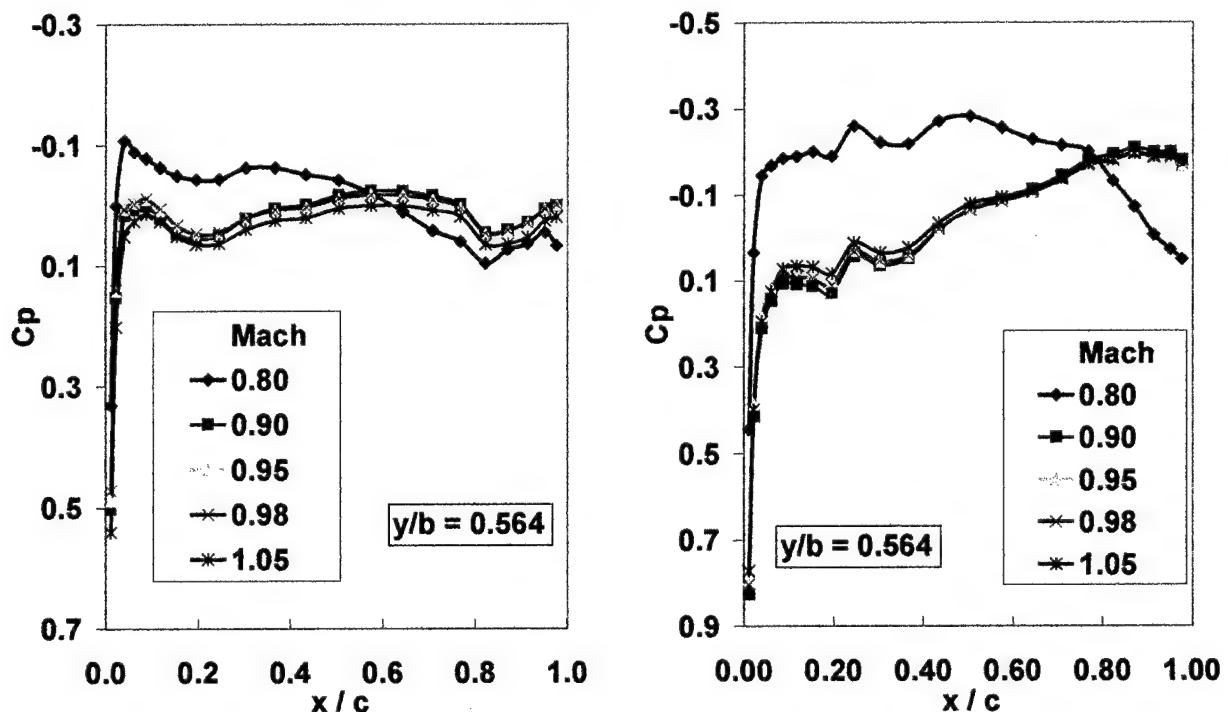


Figure 3.6c Cp Distribution at  $y = 0.564$  b.

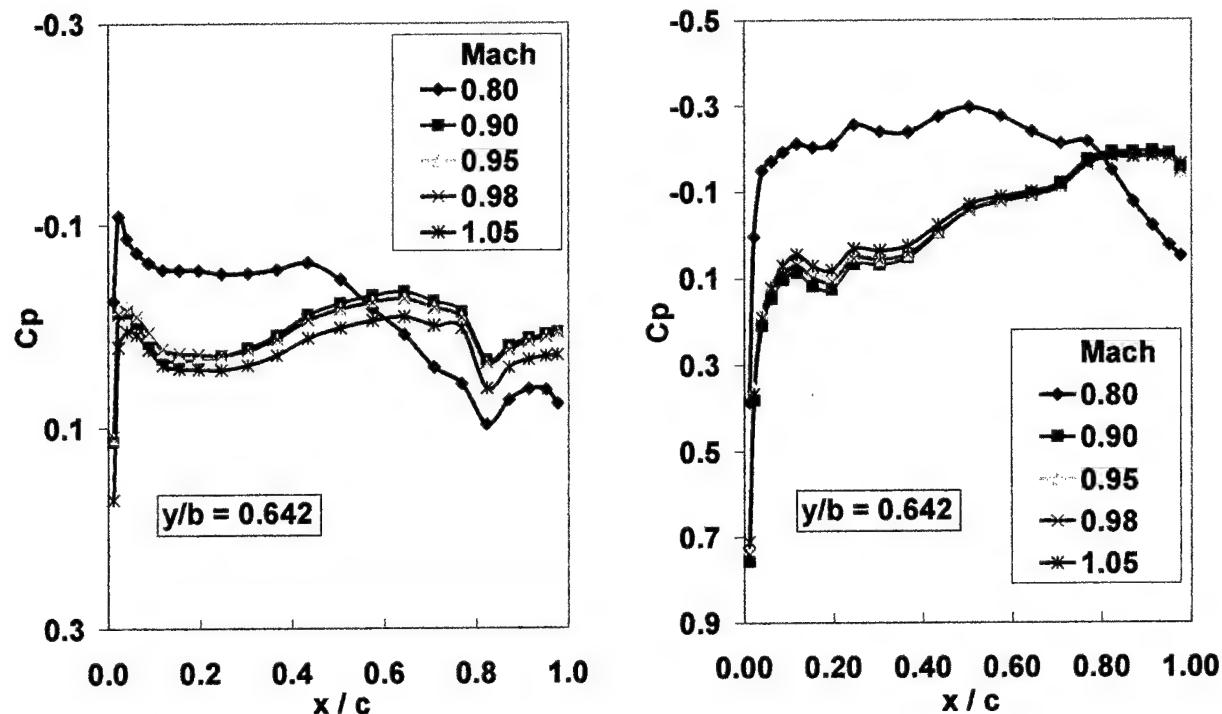


Figure 3.6d Cp Distribution at  $y = 0.642$  b.

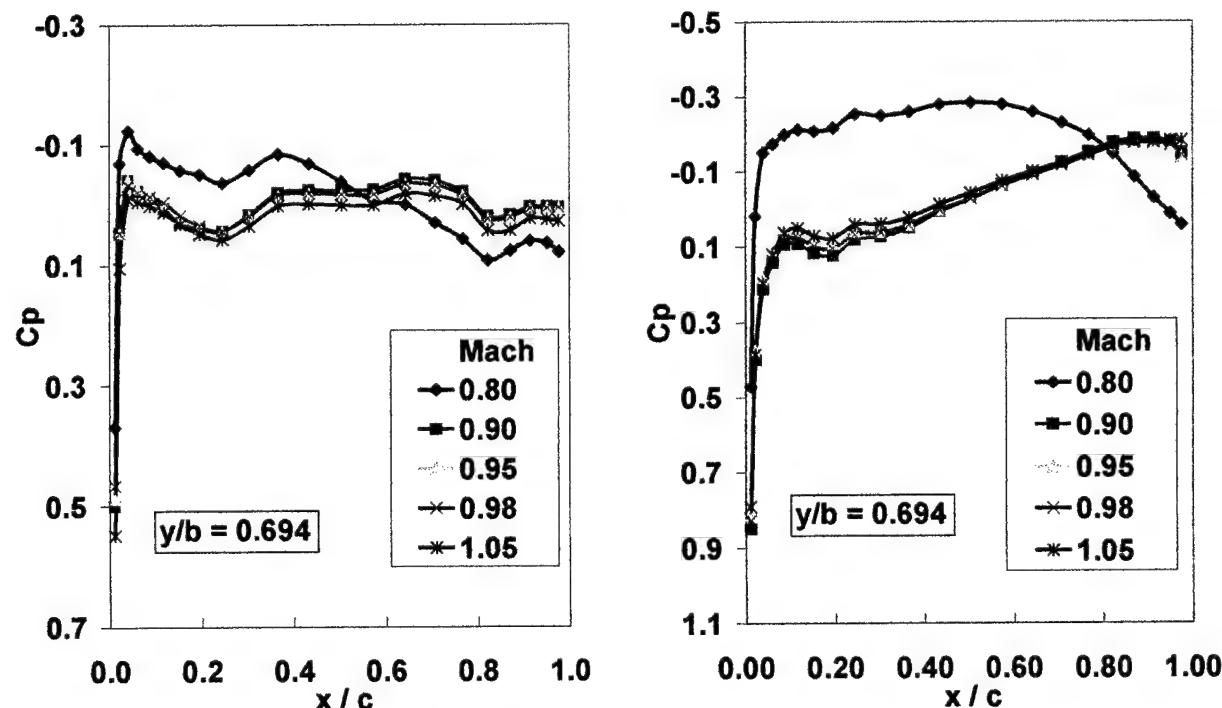


Figure 3.6e Cp Distribution at  $y = 0.694$  b.

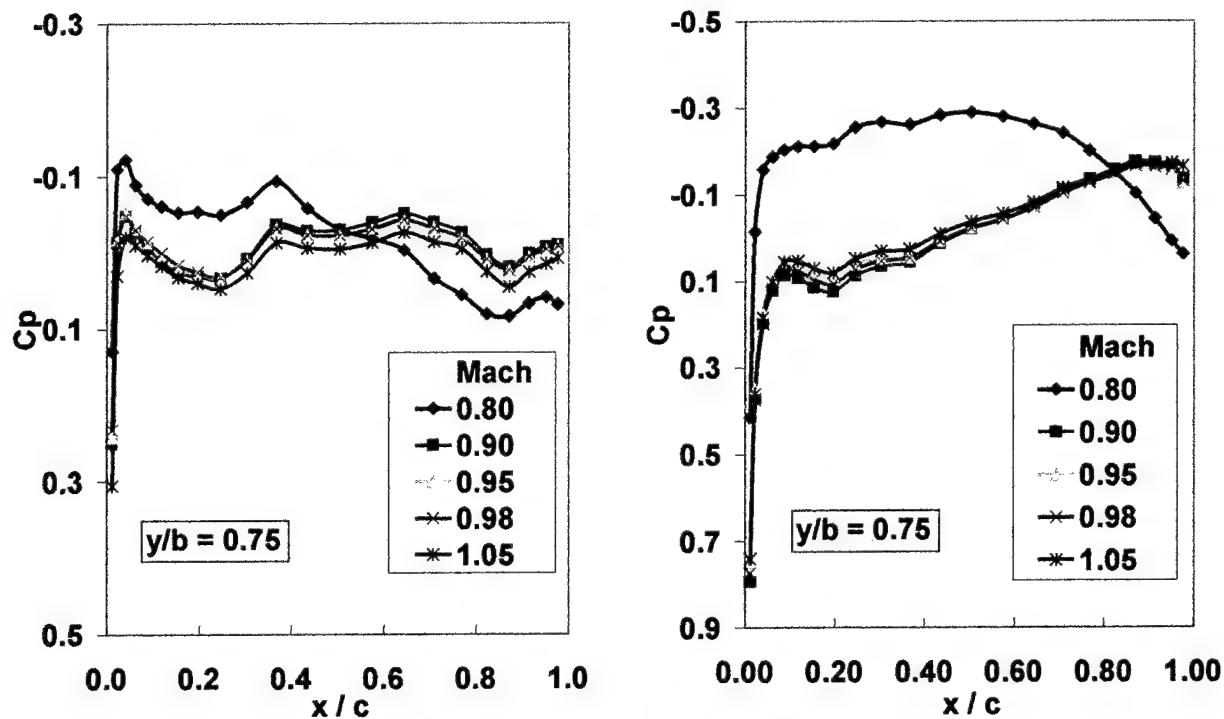


Figure 3.6f Cp Distribution at  $y = 0.75$  b.

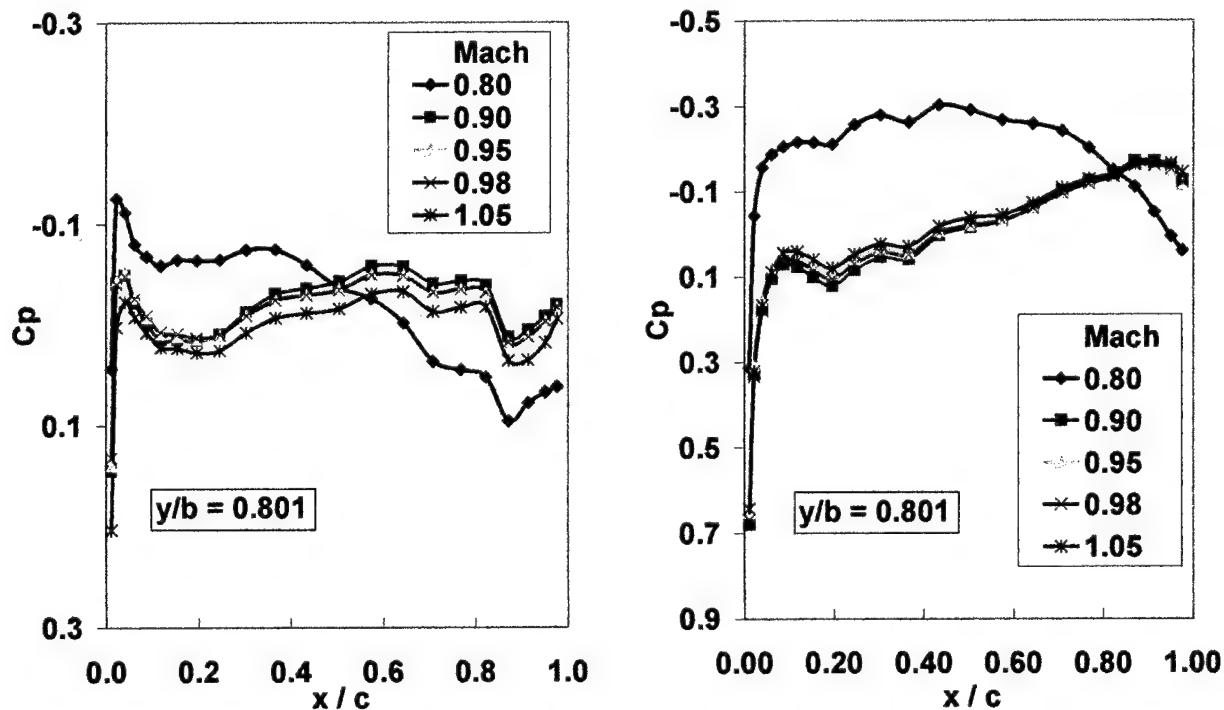
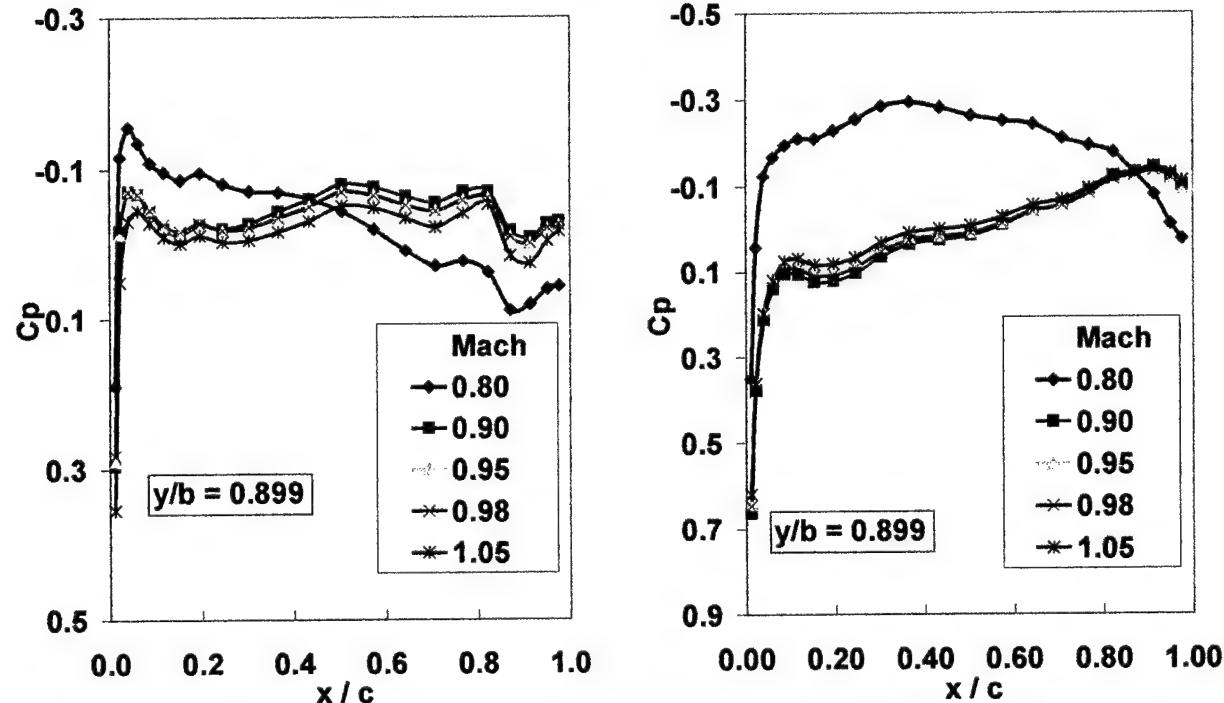
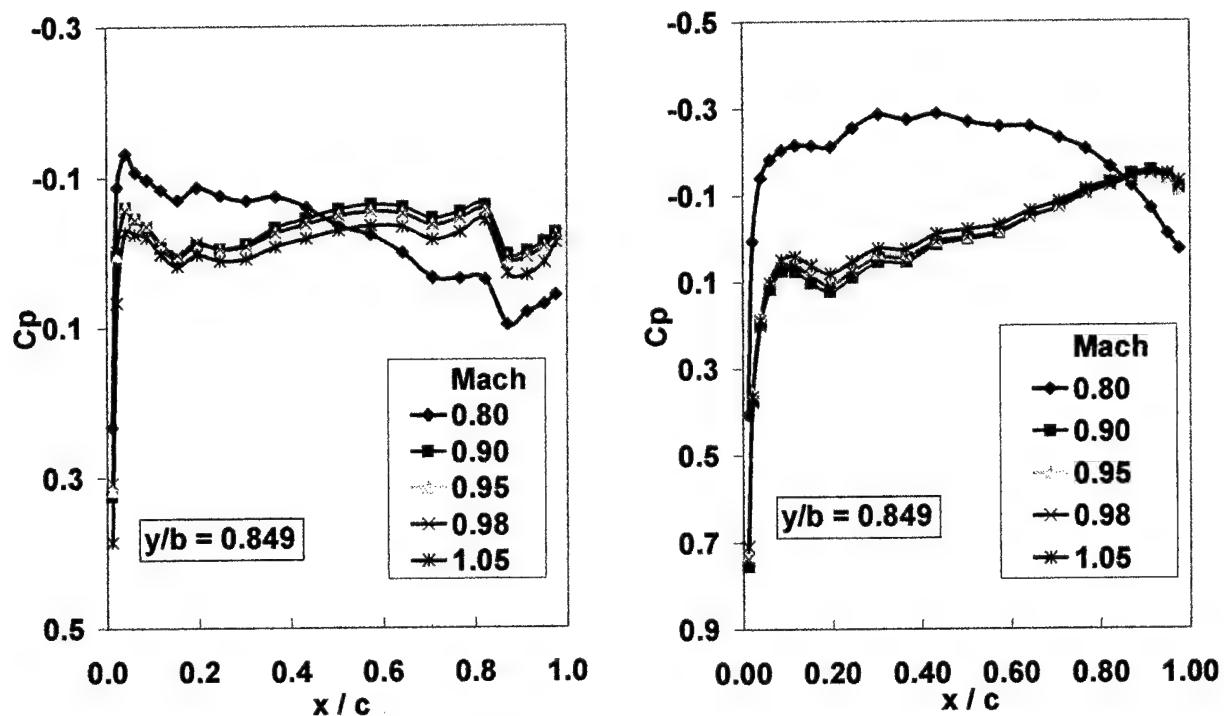
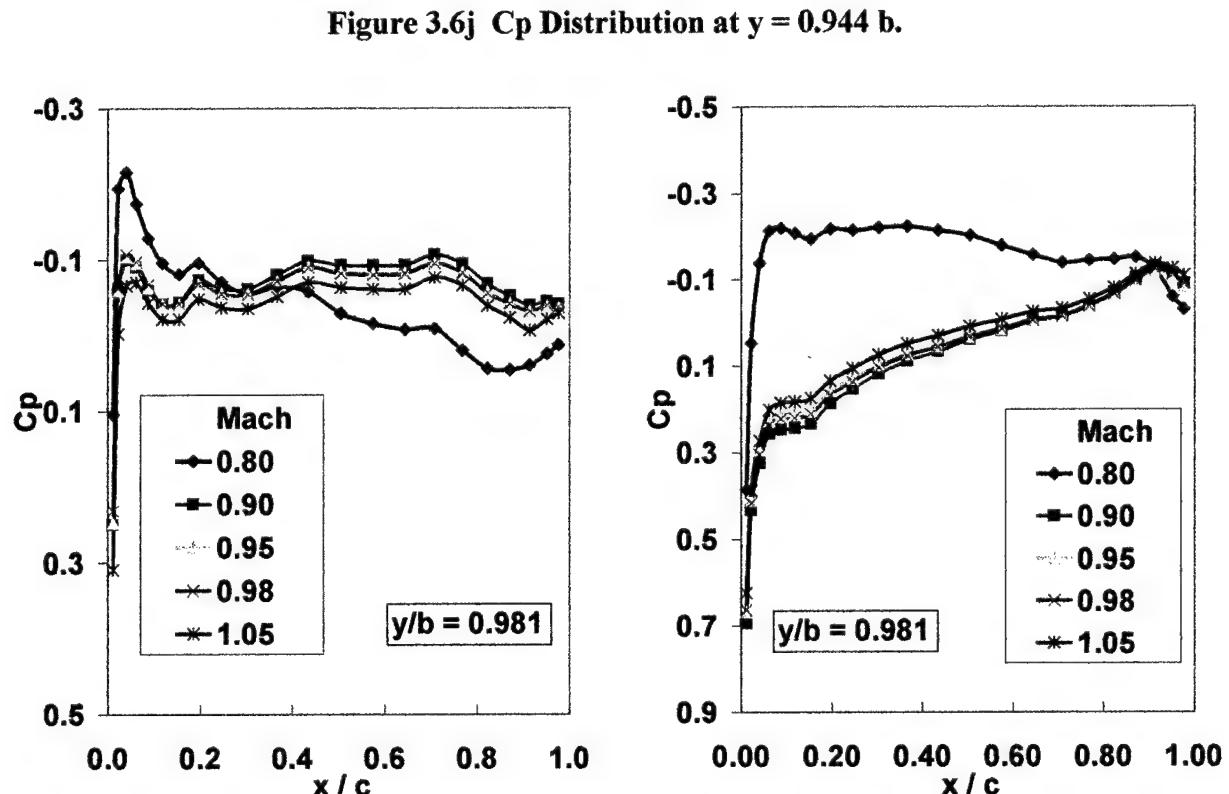
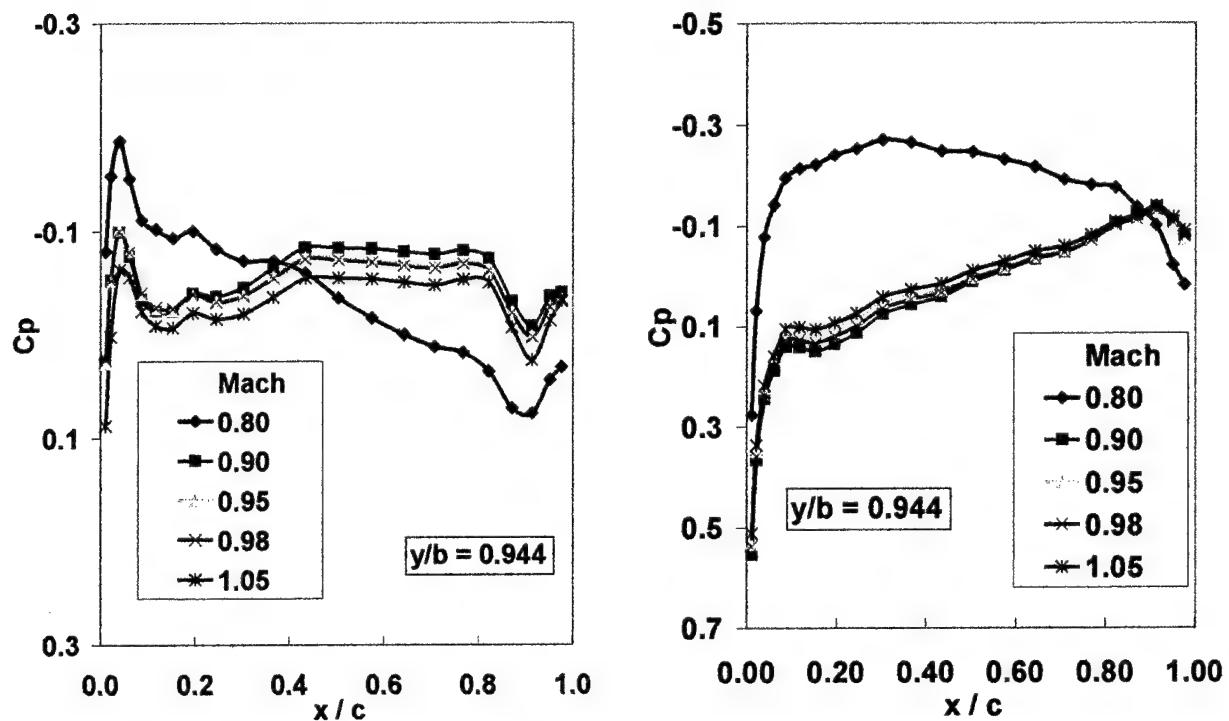


Figure 3.6g Cp Distribution at  $y = 0.801$  b.





**Figure 3.6k Cp Distribution at  $y = 0.981$  b.**

## SECTION 4

### CORRELATION OF THE F-16 / STORE CLASSICAL FLUTTER PREDICTIONS WITH FLIGHT TEST DATA

#### 4.1 Flight Test Result and Previous Numerical Prediction

Reference 1 described that a classical flutter instability occurred during the flight test of F-16 with the air-surface missiles at Station 3 and LAU-129/A launcher at the wing tip (Figure 3.1). The instability response was characterized by a sudden onset of high-amplitude wing oscillations. The measured oscillatory wing tip response during level flight at five altitude is shown in Fig 3.1. At 10,000 ft altitude and level flight, no significant structural responses occurred between Mach 0.80 and 0.90, but a rapid onset of high amplitude anti-symmetric oscillations was encountered at Mach 0.95 and frequency of 9.5 Hz. Similar behavior was observed for other test altitudes.

An attempt to predict this classical flutter case has been conducted by Denegri in Refs 1 and 18. The calculation was performed at  $M = 0.90$ . The aerodynamic model used in Ref 1 and 18 is an isolated wing with tip launcher only, *i.e.* the same as the aerodynamic model #1 of the present work as shown in Fig 4.1. No aerodynamic modeling of fuselage, empennage and underwing stores is included. The only influence of the fuselage, empennage and stores considered in the flutter analysis is their effect on structural modal characteristics. The flutter calculation was conducted using the non-matched method. Two critical speed were found in the calculations. The first critical speed and frequency are  $V_f = 442$  KCAS and  $f_f = 10.17$  Hz with a hump-mode type of flutter mode. The second critical speed is at  $V_f = 745$  KCAS and  $f_f = 9.37$  Hz with an explosive type of flutter mode (Ref 18). The result indicates that the flight test frequency is well correlated with the second flutter mode frequency. However, the calculated flutter speed was higher than the flight test data.

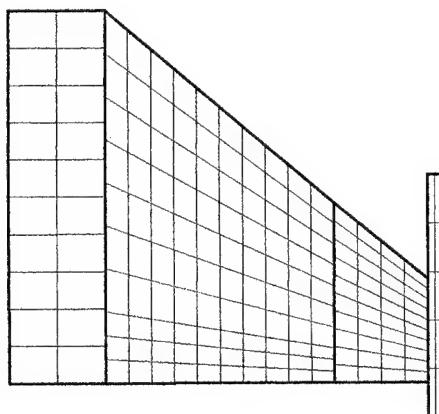


Figure 4.1 Aerodynamic Model #1 for the Classical Flutter Case.

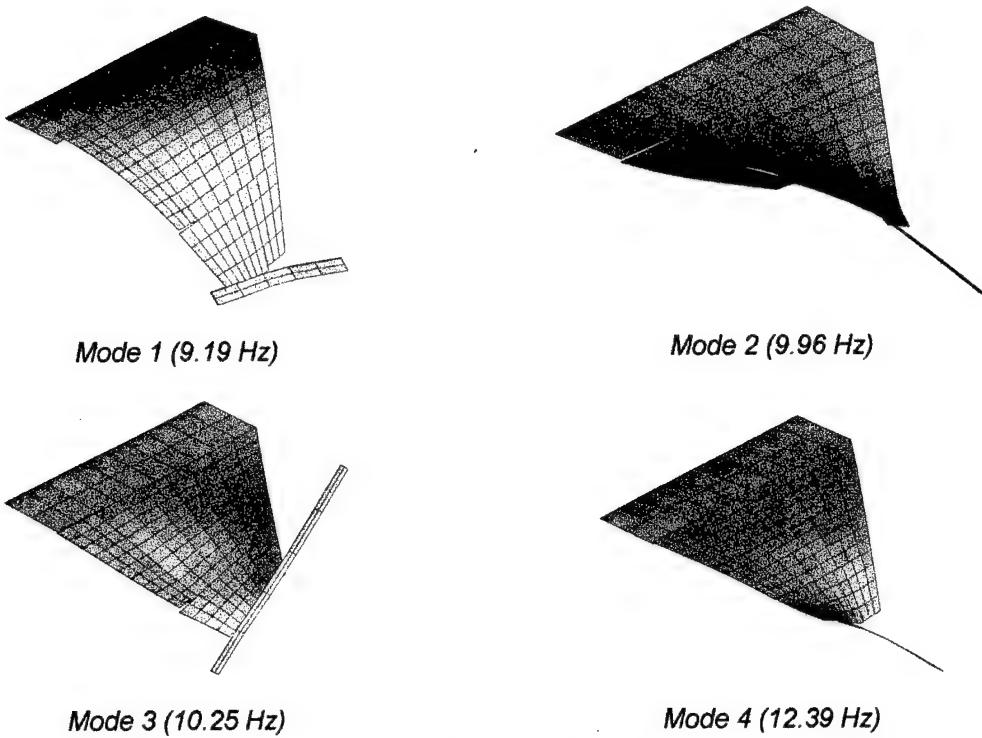
## 4.2. Linear Aerodynamic Approach

### 4.2.1 Aerodynamic Model #1

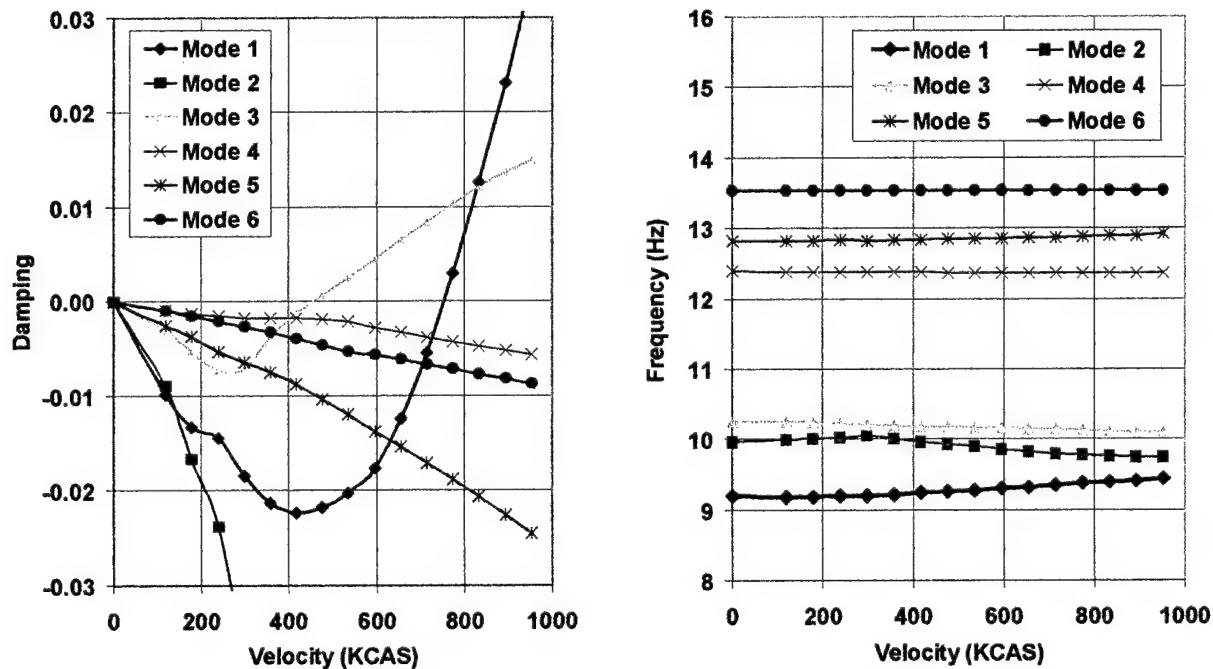
The first aerodynamic model of the present work is the isolated wing with tip launcher (Figure 4.1), *i.e* the same as the model used in Ref 1. Figure 4.2 shows the first four natural (undamped) mode shapes. Employing a non-matched point flutter analysis of ZAERO at  $M = 0.90$  and sea level density, the first critical speed was found to be  $V_f = 456$  KCAS and flutter frequency was  $f_f = 10.17$  Hz (dominated by the third structural mode), and the second flutter speed/frequency was  $V_f = 752$  KCAS /  $f_f = 9.36$  Hz (dominated by the first structural mode). These results are very close to the analysis results in Refs 1 and 18 as shown in Table 4.1 and Fig 4.3. Figure 4.4 shows the flutter mode shape for  $V_f = 752$  KCAS at several time steps. The V-g and V-f plots of the present flutter analysis given in Fig 4.4 show similar results to Fig 12 of Ref 1. Note that Refs 1 and 2 used different numerical procedures for computing the unsteady aerodynamics, *i.e.* a doublet-lattice method for the unsteady aerodynamic prediction and a Laguerre variation of the classical K-method for the flutter solution.

**Table 4.1 Flutter Results Using Linear Aerodynamics at  $M = 0.9$ .**

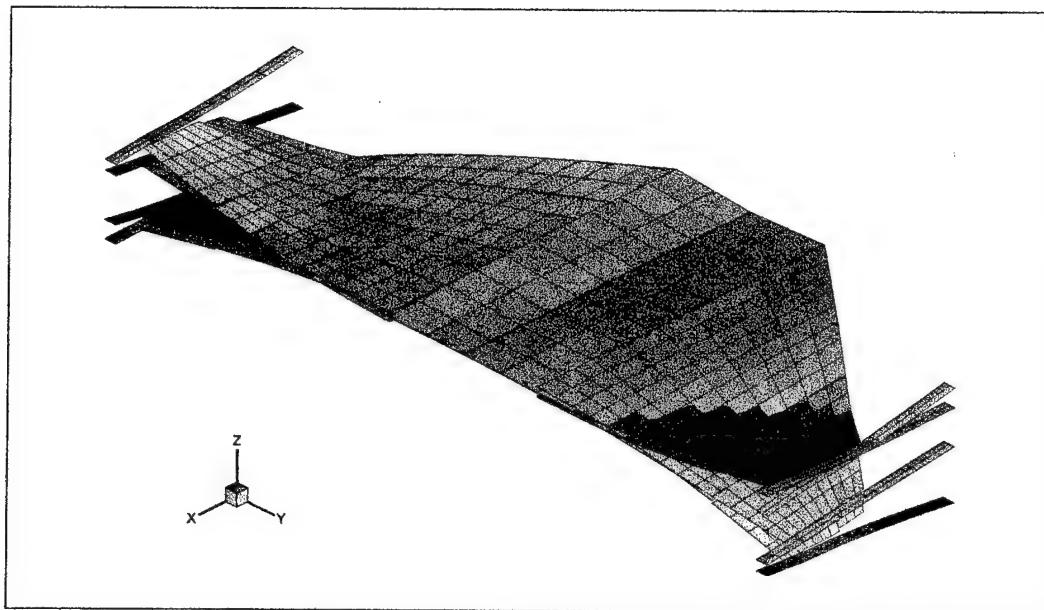
Aerodynamic Model or Methods		Flutter Speed (KCAS)	Flutter Frequency (Hz)
Flight test (on set of flutter speed)		585.4	9.5
Denegri's DLM results (Aerodynamic Model #1: Wing + tip launcher only, non matched point)	g = 0%	745	9.37
	g = 1%	807	9.39
Aerodynamic Model #1: Wing + tip launcher only, (non matched point)	g = 0%	752	9.36
	g = 1%	831	9.36
Aerodynamic Model #2: Whole aircraft without underwing stores (matched point)	g = 0%	483	9.56
	g = 1%	517	9.55
Aerodynamic Model #3: Whole aircraft with stores (matched point)	g = 0%	478	9.57
	g = 1%	513	9.55
Aerodynamic Model #3: Whole aircraft with stores but without rigid body modes (matched point)	g = 0%	486	9.56
	g = 1%	522	9.55



**Figure 4.2 Vibration Modes of Aerodynamic Model #1.**



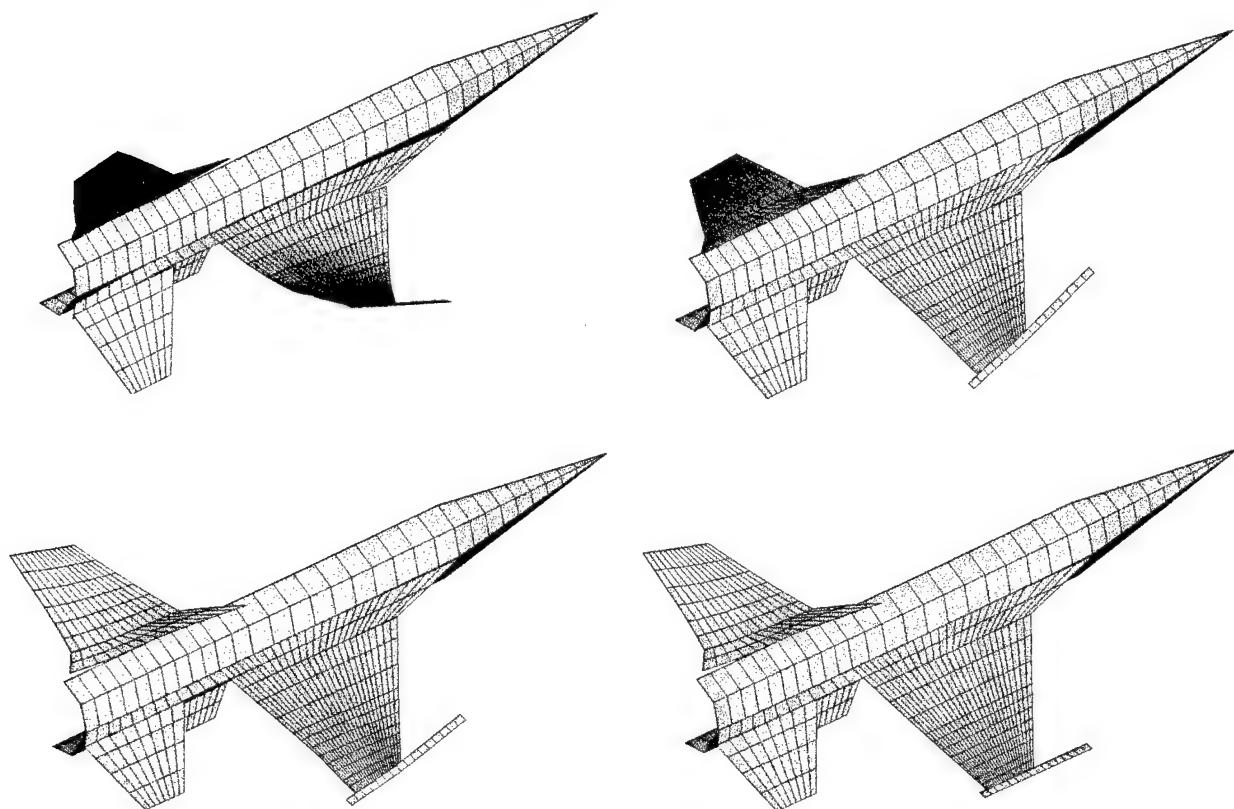
**Figure 4.3 The Flutter V-g and V-f plots for Wingtip Launcher only Model at  $M = 0.9$  Using the Linear Aerodynamic Approach.**



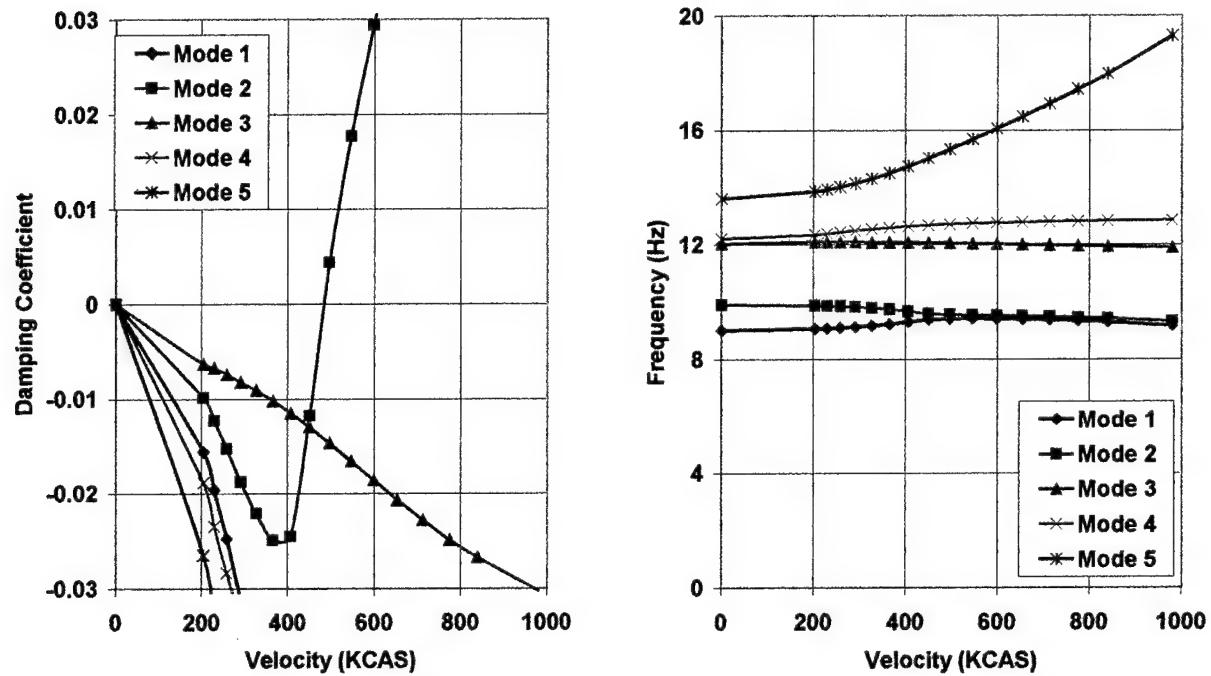
**Figure 4.4 The Flutter Mode Shape at  $V_f = 752$  KCAS and  $f_f = 9.36$  Hz  
of the Wing-Tip Launcher Only Model.**

#### **4.2.2 Aerodynamic Model #2**

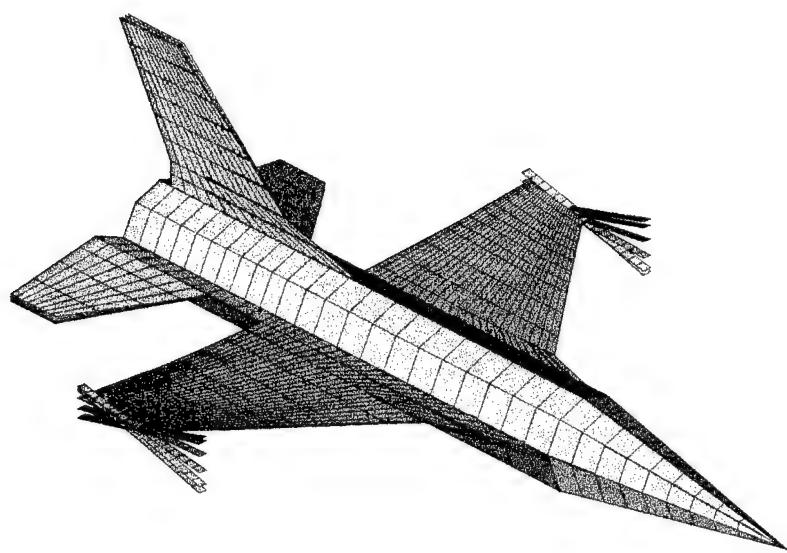
The flutter calculation was repeated using the aerodynamic model #2, i.e. the whole aircraft without underwing stores. The flutter calculation using the matched point method gave the flutter speed/frequency at  $V_f = 483$  KCAS /  $f_f = 9.56$  Hz. Note that there is no second critical speed in this second model. If the structural damping is assumed to be  $g = 1.0\%$ , than the flutter speed and frequency becomes  $V_f = 517$  KCAS and  $f_f = 9.55$  Hz. The result for this configuration shows that the inclusion of the fuselage and empennage aerodynamic model improves the result, i.e. closer to the flight test data.



**Figure 4.5 Vibration Modes of the Aircraft Model without Underwing Stores**



**Figure 4.6** The Flutter V-g and V-f Plots for the Whole Aircraft Model without Underwing Stores at  $M = 0.9$  Using the Linear Aerodynamic Approach.

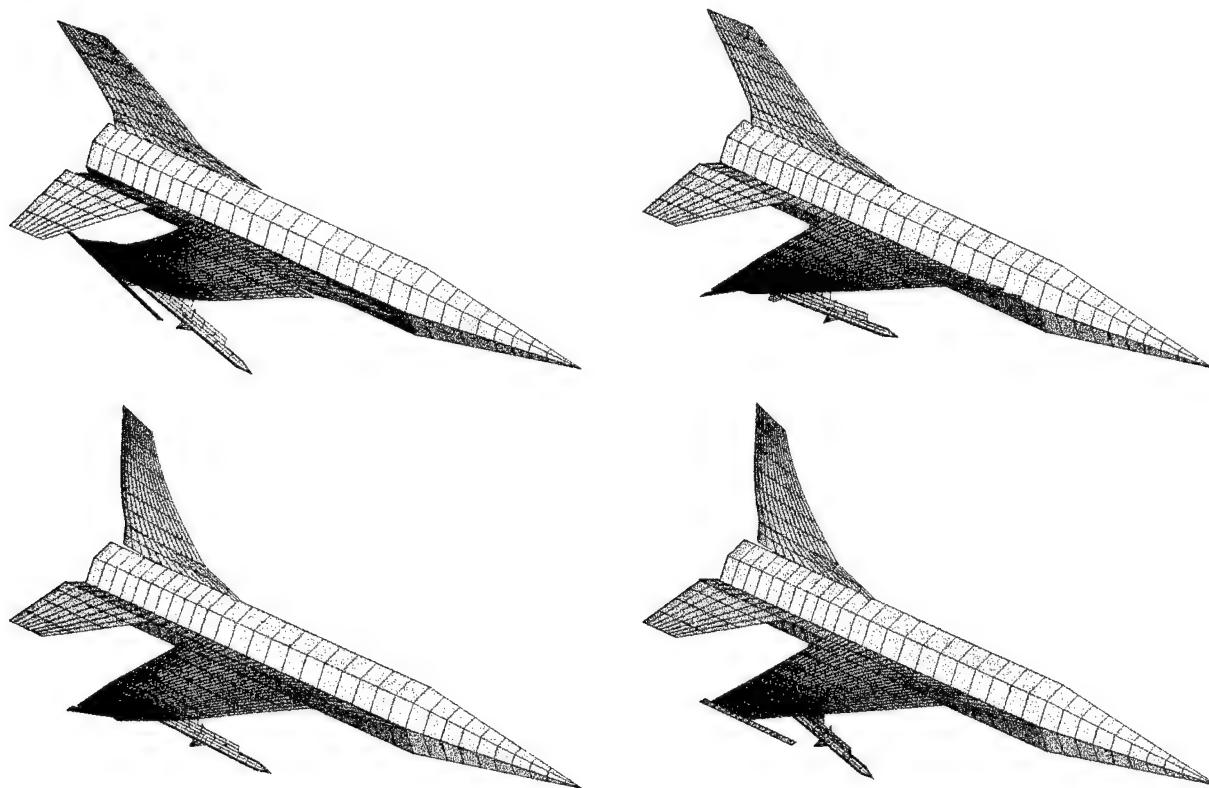


**Figure 4.7** The Flutter Mode Shape of the Aircraft Model Without Underwing Stores.

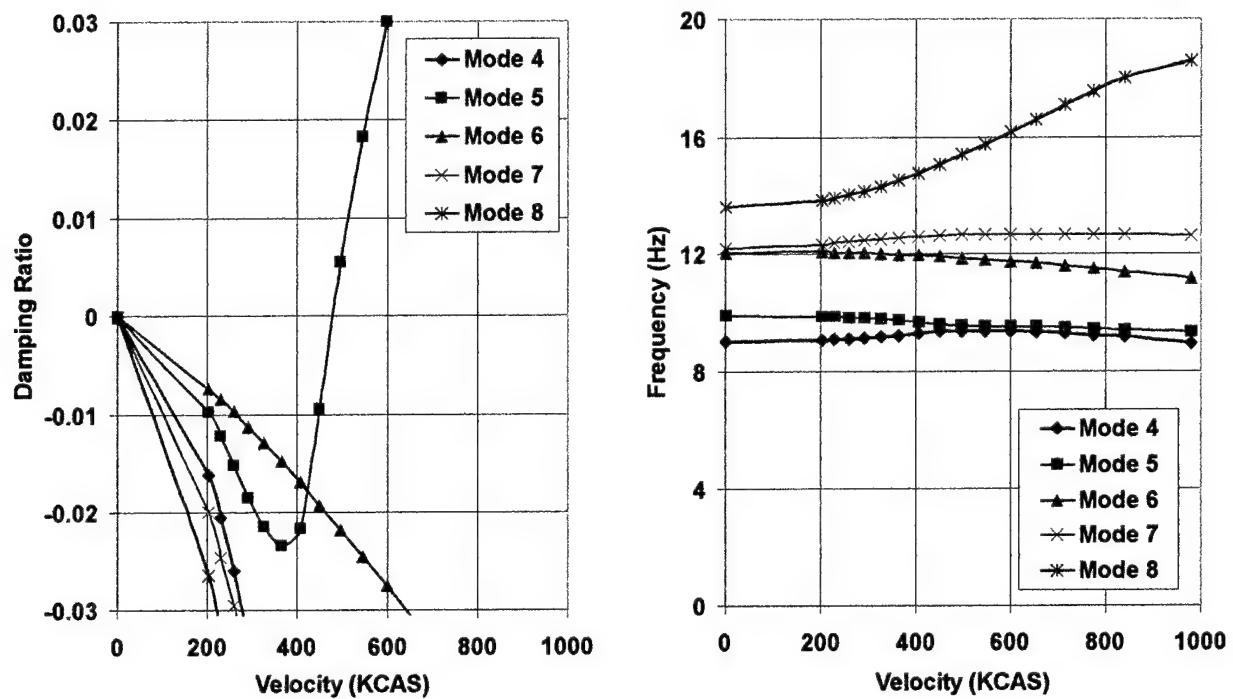
#### 4.2.3 Aerodynamic Model #3, $M = 0.90$

The flutter calculation was repeated using the aerodynamic model #3, i.e. the whole aircraft with underwing stores. The natural mode shapes are shown in Figure 4.8. The flutter calculation using the matched point method gave the flutter speed/frequency at  $V_f = 486$  KCAS /  $f_f = 9.56$  Hz. Note that there is no second critical speed in this third model. If the structural damping is assumed to be  $g = 1.0\%$  than the flutter speed and frequency becomes  $V_f = 522$  KCAS and  $f_f = 9.55$  Hz. Clearly, the result for this configuration is closer to the flight test data as shown in Table 4.1.

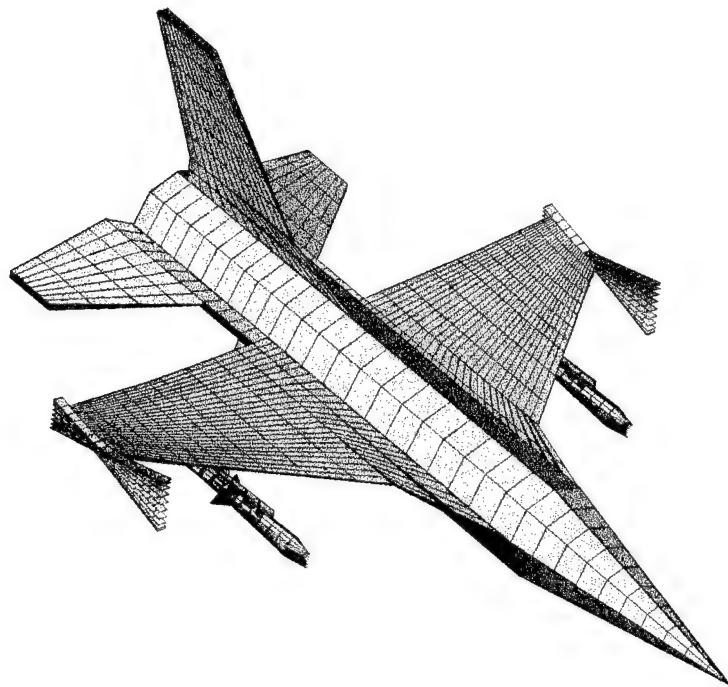
All of the previous calculations on the classical flutter did not include the structural rigid body modes. If the anti-symmetric rigid body modes are included to the whole aircraft with store model, the similar procedures gave the flutter speed / frequency at  $V_f = 478$  KCAS /  $f_f = 9.57$  Hz for  $g=0\%$ , and  $V_f = 513$  KCAS /  $f_f = 9.55$  Hz for  $g = 1.0\%$ . These results are very close to the results of the model without rigid body modes. Therefore, for the classical flutter of the present case, the influence of the rigid body modes is not significant. Figure 4.9 shows the flutter V-g and V-f diagrams for aerodynamic model #3. The flutter modes for several time steps is presented in Fig 4.10.



**Figure 4.8 Vibration Modes of the Aircraft Model with Underwing Stores**



**Figure 4.9 The Flutter V-g and V-f plots of the Whole Aircraft Model with Underwing Stores at  $M = 0.9$  using the Linear Aerodynamic Approach.**



**Figure 4.10 The Flutter Mode Shape of the Whole Aircraft Model with Underwing Stores at  $M = 0.9$ .**

#### 4.2.4. Aerodynamic Model #3. Mach 0.8 – 1.05

The flutter calculations for  $M = 0.90$  showed improvement on the solution results if a more refined aerodynamic model is used. However, previous results does not give a direct correlation between the flutter prediction and the flight test data. Note that, to indicate the flutter onset, the flight test data presents the measure acceleration response level in terms of Mach numbers and altitudes. Therefore, in order to correlate the numerical predictions with the flight test data, the calculation was repeated for several Mach numbers, including  $M = 0.80, 0.90, 0.95, 0.98$ , and  $1.05$ . The flutter solution is represented by the damping coefficient as a function of Mach number for each altitude as shown in Fig 4.11. Note that the correlation of the flutter prediction with the altitude is automatically generated by using the matched point option of the g-method.

The critical speed and frequency are given in Table 4.2. The results presented in Fig 4.11. shows that

- Linear aerodynamic approach (ZONA6/ZONA7) predicts explosive damping of the unstable mode in all altitudes.
- For the altitude lower than 15,000 ft, the flutter onset Mach number of the flight test data was correlated very well with the linear aerodynamic approach if the structural damping is assumed to be 1%.
- For altitudes of 15,000 ft and higher, the onset Mach number of the flight test data occurred near  $M = 0.98$  and  $1.02$  where the nonlinearity effect of the transonic aerodynamic is significant. Therefore, the linear aerodynamic approach gives a higher prediction of the onset Mach number for these altitudes.

**Table 4.2 Critical Speed and Frequency Using the Linear Aerodynamic Approach (ZONA6/ZONA7)**

<i>Mach Number</i>	<i>Damping Coeff. g (%)</i>	<i>Flutter Speed (KCAS)</i>	<i>Flutter Frequency (Hz)</i>
<b>0.80</b>	0.0	485	9.58
	1.0	521	9.56
<b>0.90</b>	0.0	486	9.56
	1.0	522	9.55
<b>0.95</b>	0.0	479	9.56
	1.0	515	9.55
<b>0.98</b>	0.0	500	9.58
	1.0	556	9.58
<b>1.05</b>	0.0	490	9.58
	1.0	517	9.58

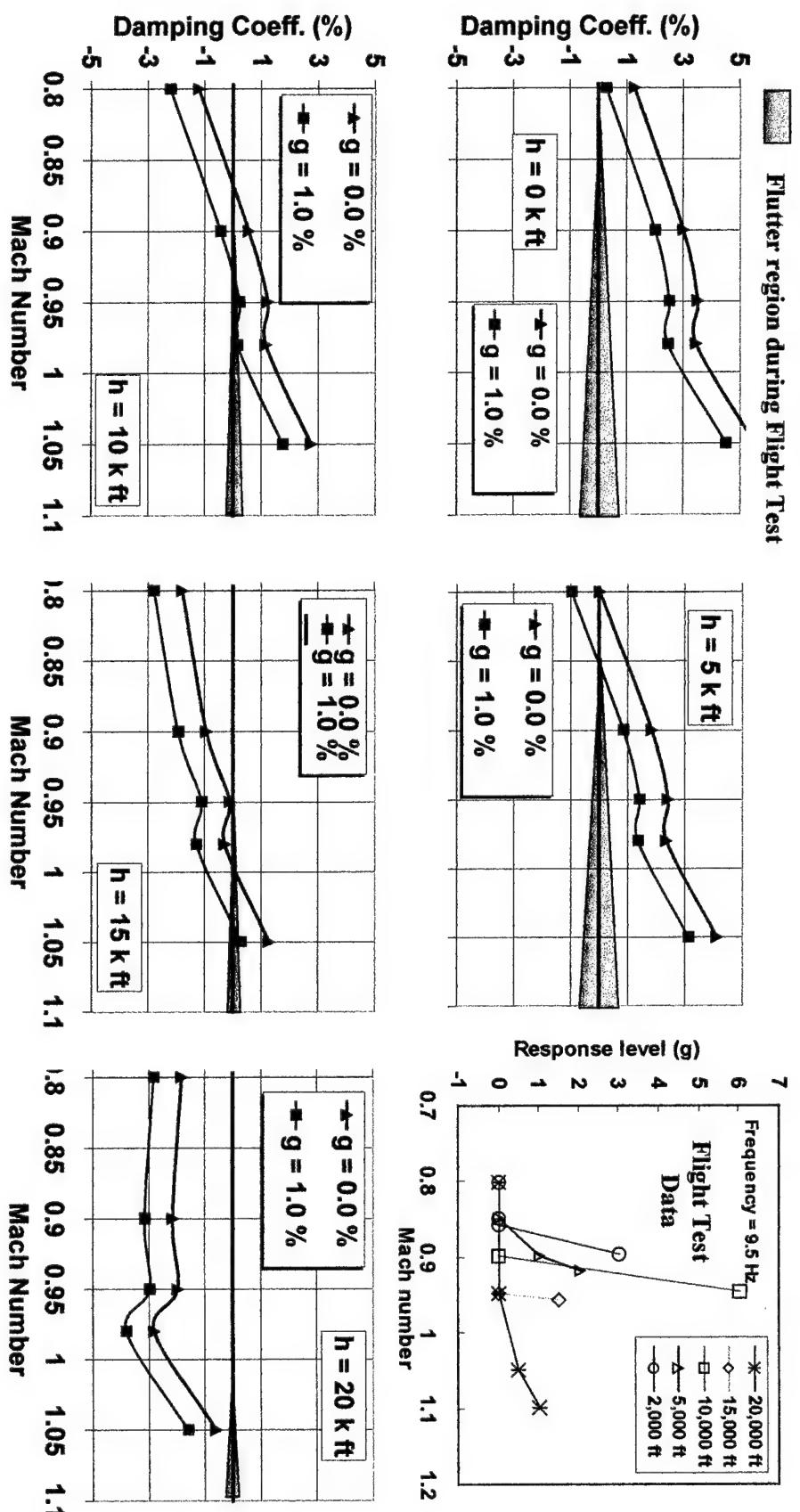


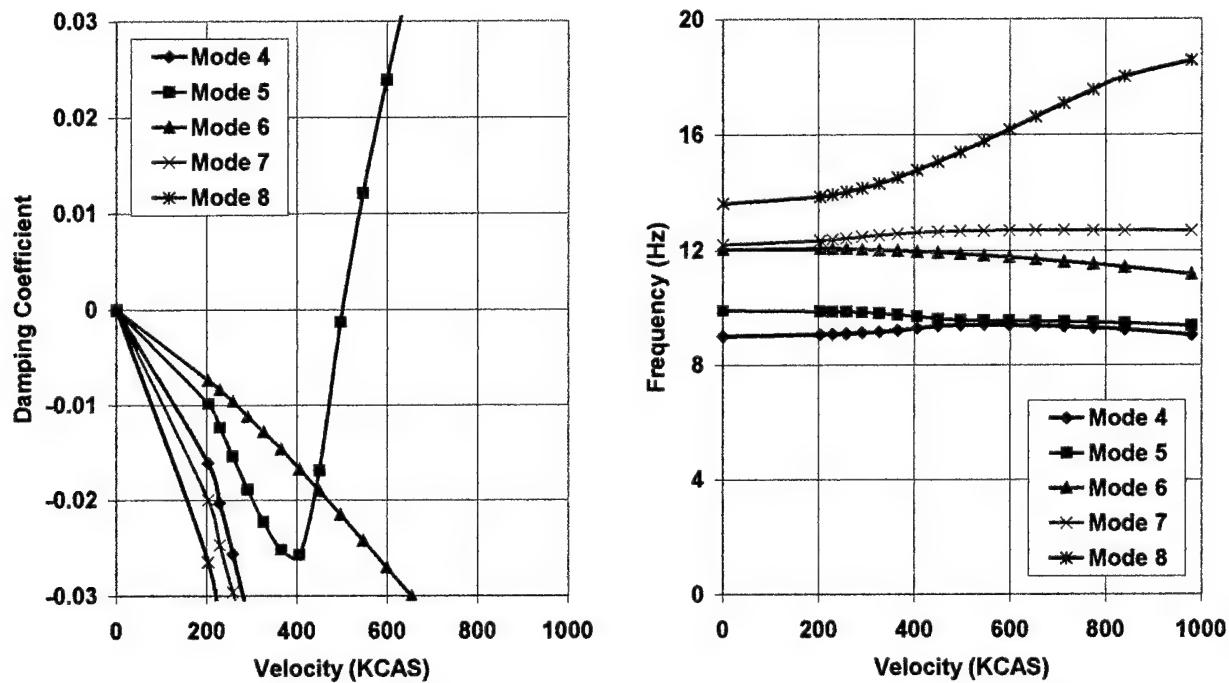
Fig 4.11 Correlation between the Flutter Prediction using the Linear Aerodynamic Approach (ZONA6/ZONA7) with Flight Test Data of the Classical Flutter Case.

### 4.3 Nonlinear Aerodynamic Approach

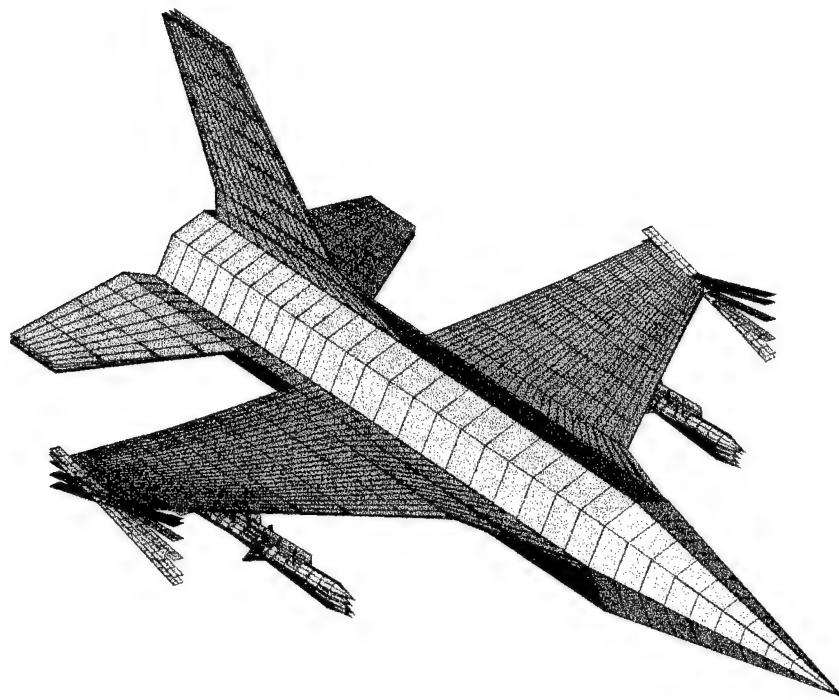
The flight test for the classical flutter configuration indicated that the aeroelastic instability for this case occurred between 0.85 and 1.1, *i.e.* in transonic regime where the nonlinear behavior of the aerodynamic flow may significantly influence the critical speed. To investigate the flutter calculation in this transonic regime, a nonlinear aerodynamic approach based on the ZTAIC method was used for the prediction of the unsteady aerodynamic data. The steady aerodynamic data was provided by Dr. Charles Denegri of Eglin Air Force Base as shown in Section 3. The flutter calculation was conducted for the whole aircraft with stores. Mach numbers ranged from 0.80 to 1.05. Rigid body modes were included in the structural dynamic calculations.

#### 4.3.1 Aerodynamic Model #3 at $M = 0.90$

The flutter calculation for  $M = 0.90$  using the matched point method gave the flutter speed/frequency at  $V_f = 501$  KCAS /  $f_f = 9.58$  Hz. Note that there is no second critical speed in this third model. If the structural damping is assumed to be  $g = 1.0\%$ , the flutter speed and frequency becomes  $V_f = 538$  KCAS and  $f_f = 9.56$  Hz. Compared to the results based on the linear aerodynamic approach given in Table 4.1, the present result using the nonlinear aerodynamic approach is closer to the flight test data. Figure 4.12 shows the V-g and V-f plot for Mach 0.90. The associated flutter mode is presented in Fig 4.13.



**Figure 4.12 The Flutter V-g and V-f plots of the Whole Aircraft Model with Underwing Stores at  $M = 0.9$  Using The Nonlinear Aerodynamic Approach.**



**Figure 4.13 The Flutter Mode Shape of The Whole Aircraft Model with Underwing Stores at  $M = 0.9$  Calculated Using The Non-Linear Aerodynamic Method.**

#### **4.3.2 Aerodynamic Model #3 at $M = 0.80 - 1.05$**

In order to correlate the numerical predictions with the flight test data, the calculation for the nonlinear aerodynamic approach was repeated for several Mach numbers, namely  $M = 0.80$ ,  $0.90$ ,  $0.95$ ,  $0.98$ , and  $1.05$ . The flutter solution is represented by the damping coefficient and Mach number as well as the altitudes. The critical speed and frequency for each Mach number are given in Table 4.3. The results presented in Fig 4.14. shows that:

- ZTAIC, i.e. the nonlinear aerodynamic approach, predicts explosive damping of the unstable mode in all altitudes.
- In the post-flutter region, the non-linearity induced stable damping (from either structures or aerodynamics) can not nullify the explosive unstable damping, leading to flutter.
- ZTAIC results indicate that the onset of flutter is very sensitive to the linear structural damping.
- Overall, ZTAIC predicts the flutter onset Mach number better than the linear aerodynamic approach for all altitudes.

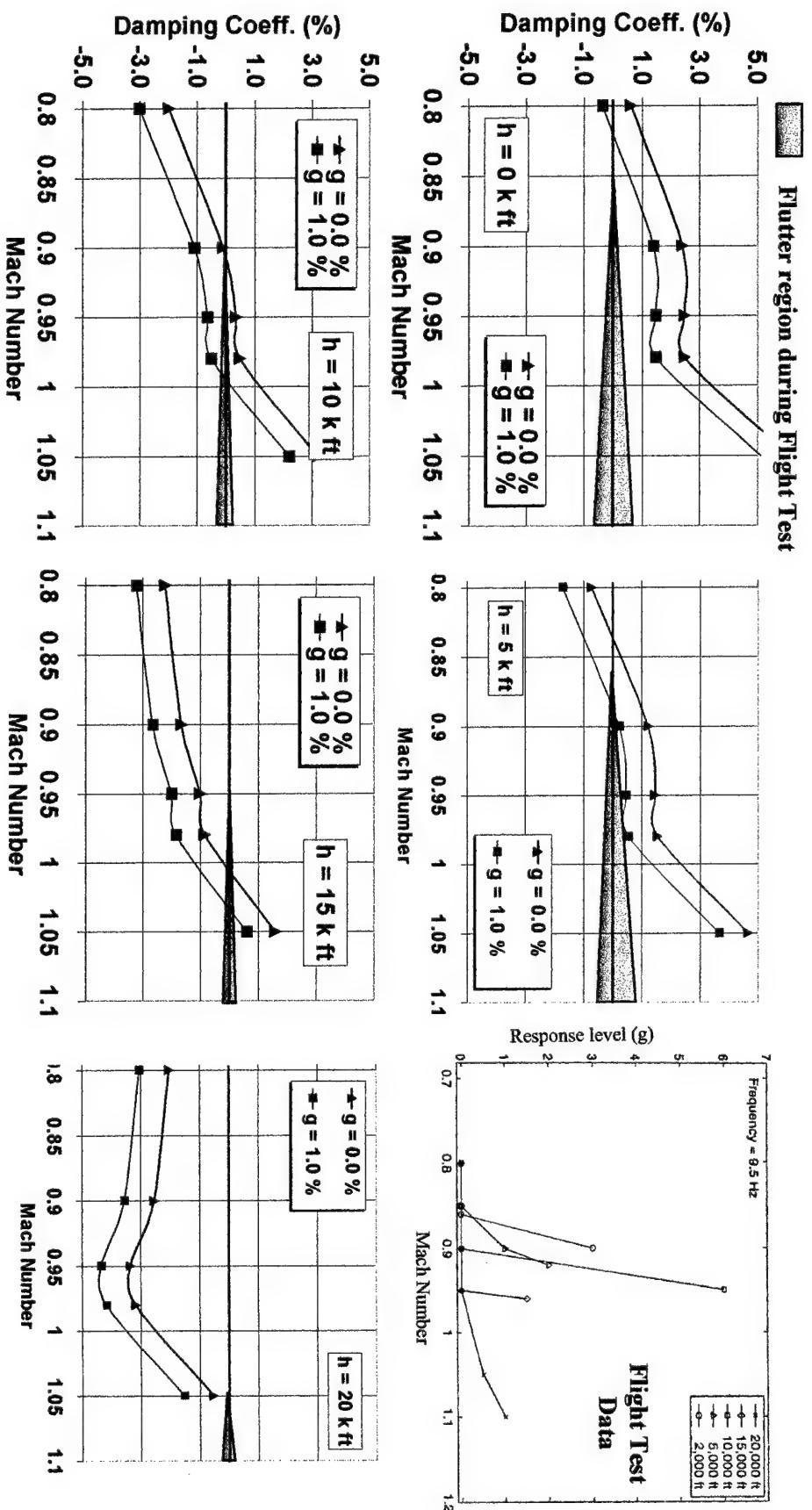


Figure 4.14 Correlation between the Flutter Prediction using the Nonlinear Aerodynamic Approach (ZTAIC) and the Flight Test Data.

**Table 4.3 Critical speed and Frequency Using the Nonlinear Aerodynamic Approach (ZTAIC).**

<i>Mach Number</i>	<i>Damping Coeff. g (%)</i>	<i>Flutter Speed (KCAS)</i>	<i>Flutter Frequency (Hz)</i>
<b>0.80</b>	0.0	511	9.61
	1.0	549	9.60
<b>0.90</b>	0.0	501	9.58
	1.0	538	9.56
<b>0.95</b>	0.0	512	9.58
	1.0	555	9.58
<b>0.98</b>	0.0	522	9.59
	1.0	567	9.60
<b>1.05</b>	0.0	486	9.59
	1.0	510	9.59

## SECTION 5

### CORRELATION OF THE F-16 / STORE TYPICAL LCO PREDICTIONS WITH FLIGHT TEST DATA

#### 5.1 Flight Test Result and Previous Numerical Prediction

Reference 1 reported that the so called typical limit cycle oscillation (LCO) occurred during the flight test of F-16A Block 15 with the store configuration described in Table 3.1. The instability response was characterized by a gradual onset of sustained limited amplitude wing oscillations where the oscillation amplitude progressively increases with increasing Mach number and dynamic pressure (Ref 1). The measured oscillatory wing tip response during level flight at five altitude is shown in Figure 3.2. Reference 1 described that the dynamic aeroelastic characteristic of the configuration were well behaved. The instability response was anti-symmetric at a frequency of 7.8 Hz for all altitudes.

An attempt to predict this typical LCO case has been conducted by Denegri in Refs 1 and 18. The calculation was performed at  $M = 0.90$ . The aerodynamic model used in Refs 1 and 18 is an isolated wing with tip launcher only, *i.e.* the same as the aerodynamic model # 1 of the present work as shown in Fig 5.1. No aerodynamic modeling of fuselage, empennage and underwing stores is included. The only influence of the fuselage, empennage and stores considered in the flutter analysis is their effect on structural modal characteristics. The flutter calculation was conducted using the non-matched method. The critical speed and its frequency are  $V_f = 312$  KCAS and  $f_f = 8.1$  Hz for  $g = 0\%$ , and  $V_f = 312$  KCAS and  $f_f = 8.1$  Hz for  $g = 1\%$  (Ref 18). The result indicates that the flutter frequency was correlated well with the flight test data. However, the calculated flutter speed was lower than the flight test data.

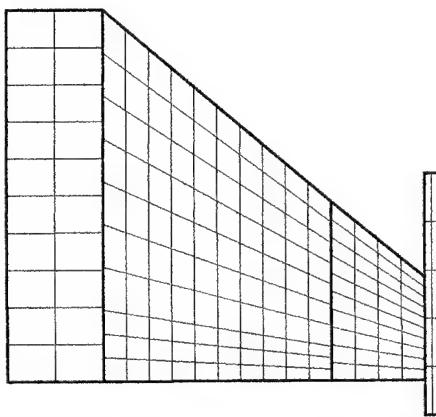


Figure 5.1 Aerodynamic Model # 1 for the typical LCO case

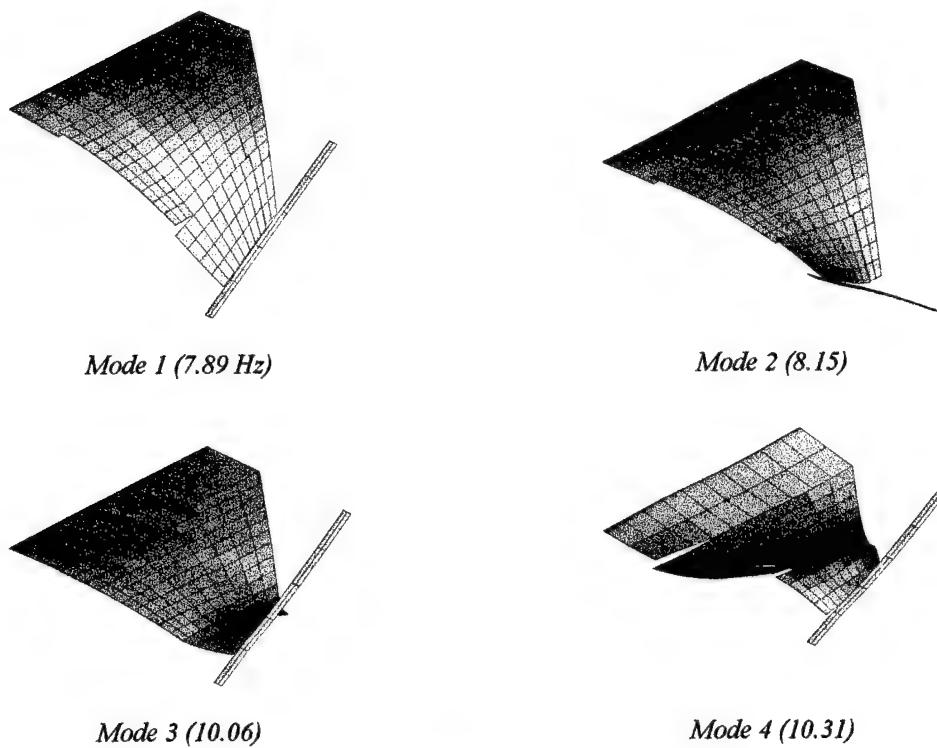
## 5.2. Linear Aerodynamic Approach

### 5.2.1 Aerodynamic Model # 1

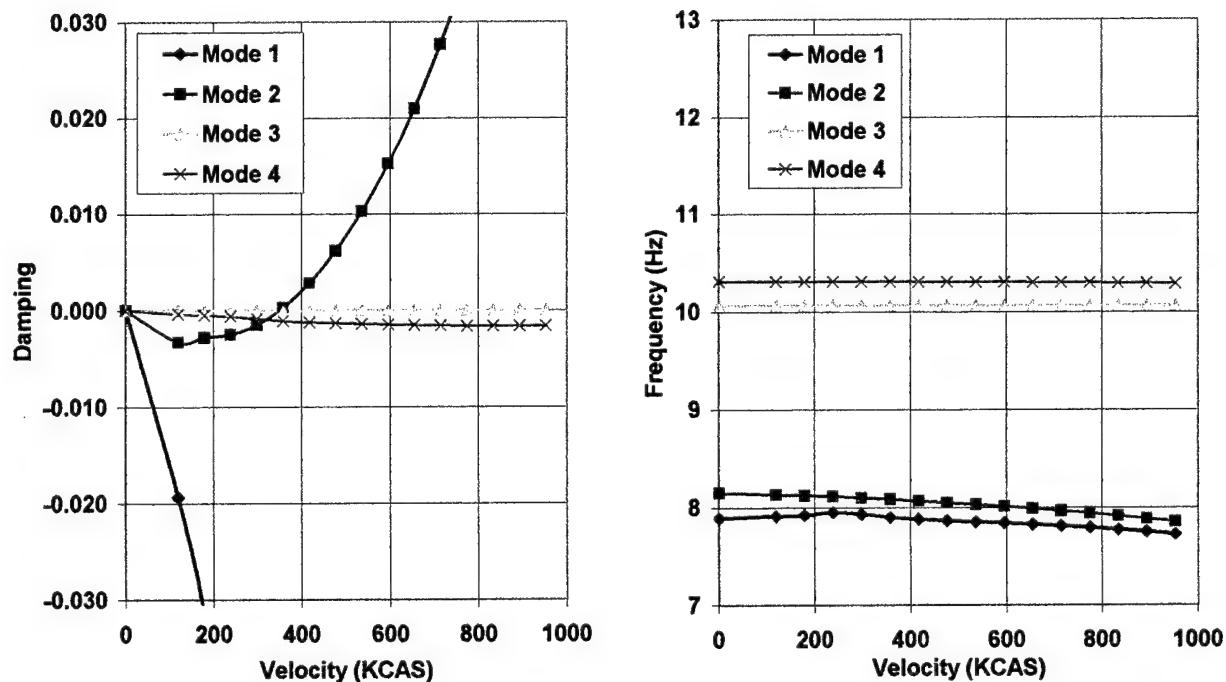
The first aerodynamic model of the present work is the isolated wing with tip launcher (Figure 5.1), *i.e* the same as the model used in Refs 1 and 18. Figure 5.2 shows the first four natural (undamped) mode shapes. Employing a non-matched point flutter analysis of ZAERO at  $M=0.90$  and sea level density, the critical speed was found to be  $V_f = 347$  KCAS and flutter frequency was  $f_f = 8.08$  Hz for the structural damping  $g = 0\%$ . For the structural damping  $g = 1\%$ , the critical speed and frequency are  $V_f = 531$  KCAS and  $f_f = 8.09$  Hz, respectively. These results are very close to the analysis results in Refs 1 and 18 as shown in Table 5.1 and Fig 5.3. Figure 5.4 shows the flutter mode shape for  $V_f = 531$  KCAS at several time steps. The  $V-g$  and  $V-f$  plots of the present flutter analysis given in Fig 5.4 show similar results to Fig 12 of Ref 17.

**Table 5.1 Flutter Results Using Linear Aerodynamics at  $M = 0.9$ .**

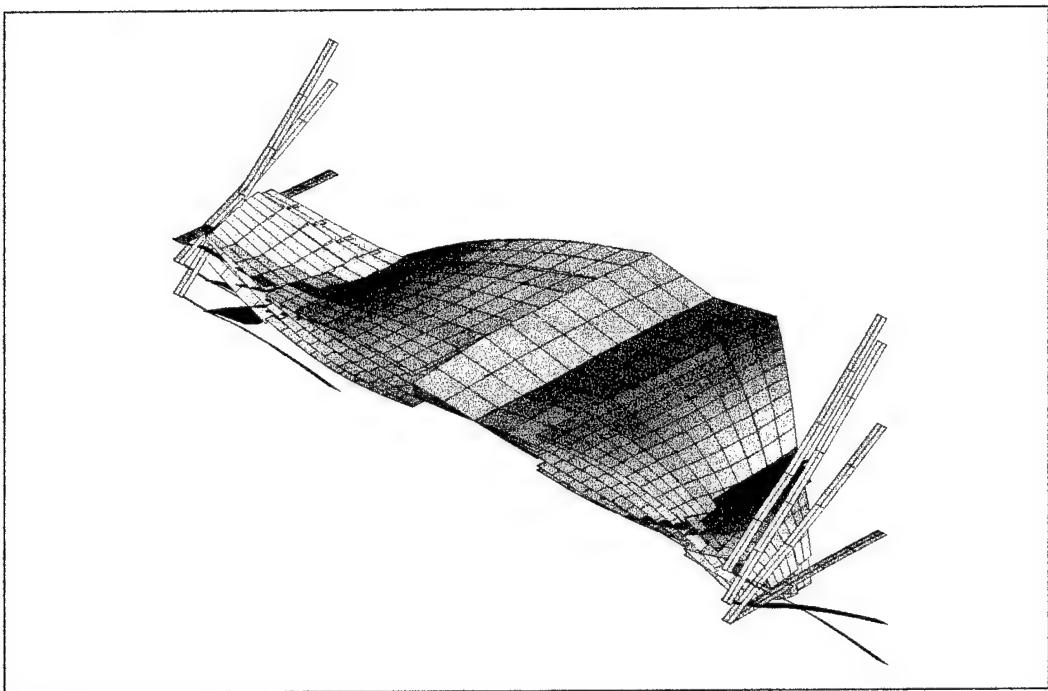
Aerodynamic Model or Methods		Flutter Speed (KCAS)	Flutter Frequency (Hz)
Flight test (on set of flutter speed)		530	7.8
Denegri's DLM results (Aerodynamic Model # 1: Wing + tip launcher only, non matched point)	$g = 0\%$	312	8.10
	$g = 1\%$	494	8.06
Aerodynamic Model # 1: Wing + tip launcher only, (non matched point)	$g = 0\%$	347	8.08
	$g = 1\%$	531	8.09
Aerodynamic Model # 2: Whole aircraft without underwing stores (matched point)	$g = 0\%$	413	8.01
	$g = 1\%$	492	8.00
Aerodynamic Model # 3: Whole aircraft with stores (matched point)	$g = 0\%$	482	7.96
	$g = 1\%$	593	7.91
Aerodynamic Model # 3: Whole aircraft with stores but without rigid body modes (matched point)	$g = 0\%$	483	7.96
	$g = 1\%$	601	7.91



**Figure 5.2 Vibration Modes of Aerodynamic Model # 2.**



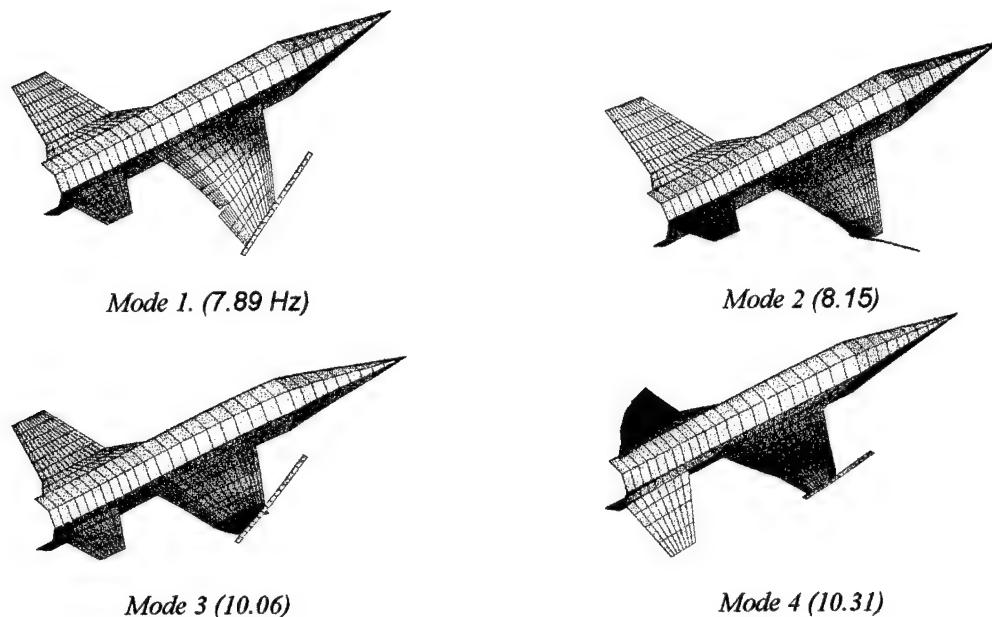
**Figure 5.3 The Flutter V-G and V-F Plots for Wing-Tip Launcher Only Model at  $M = 0.9$  Using The Linear Aerodynamic Approach.**



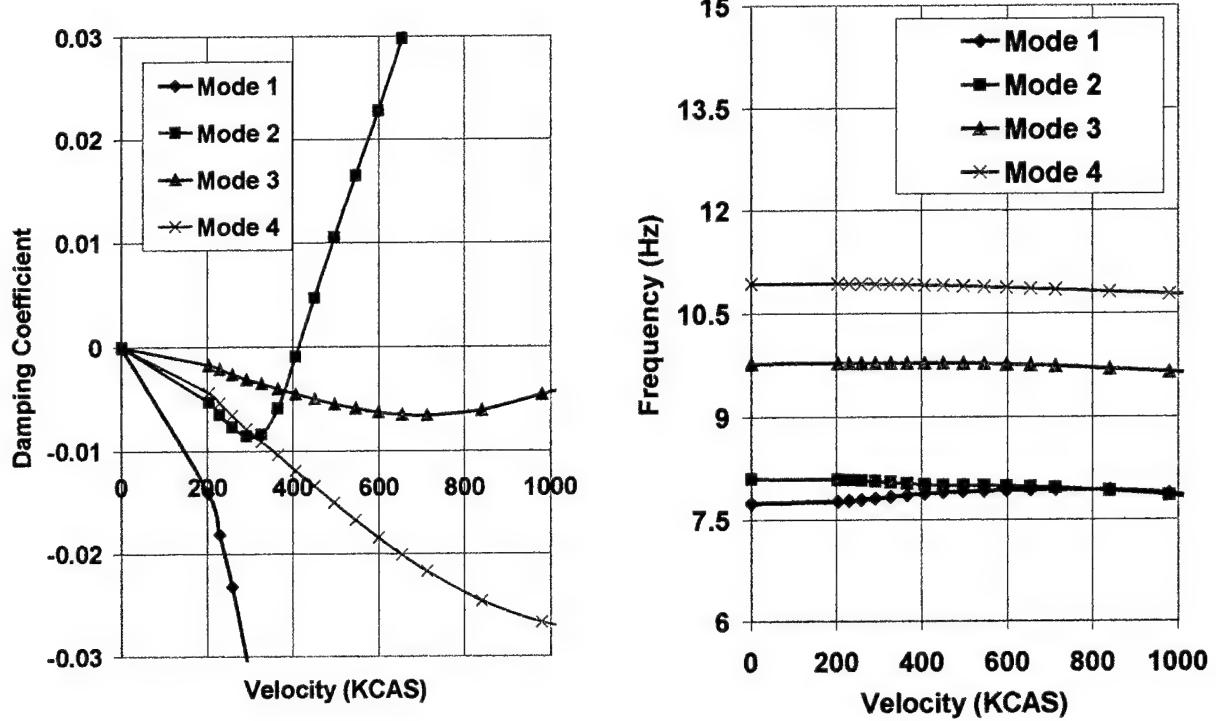
**Figure 5.4 The Flutter Mode Shape of The Wingtip Launcher Only Model.**

### 5.2.2. Aerodynamic Model # 2

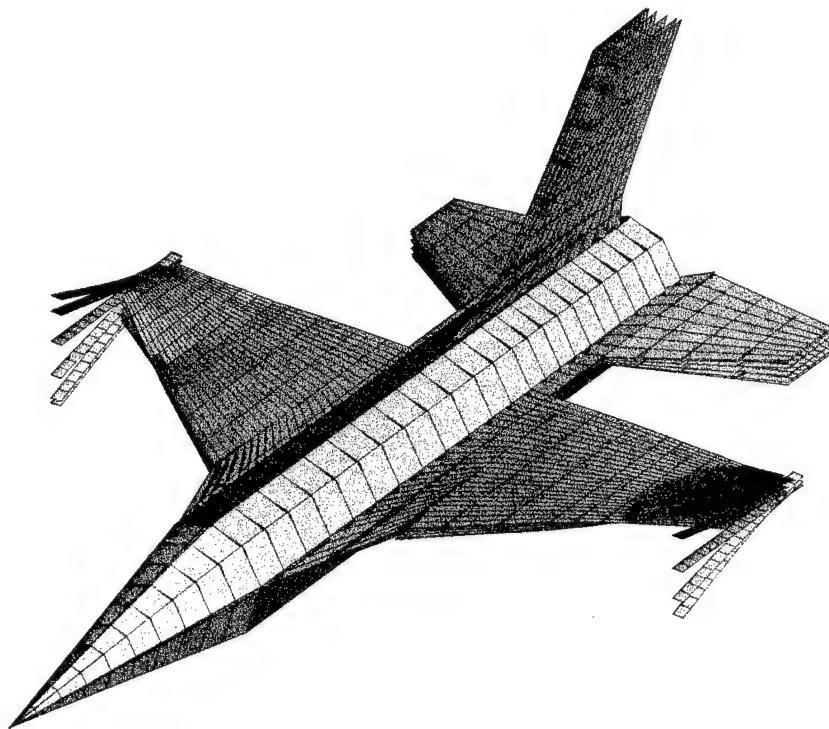
The flutter calculation was repeated using the aerodynamic model # 2, i.e. the whole aircraft without underwing stores. The flutter calculation using the matched point method gave the flutter speed/frequency at  $V_f = 413 \text{ KCAS} / f_f = 8.09 \text{ Hz}$  for  $g = 0\%$ , and  $V_f = 492 \text{ KCAS} / f_f = 8.0 \text{ Hz}$  for  $g = 1\%$ . The result for this configuration shows that the inclusion of the fuselage and empennage aerodynamic model improves the result, i.e. closer to the flight test data.



**Figure 5.5 Vibration Modes of the Aircraft Model without Underwing Stores.**



**Figure 5.6** The Flutter V-G and V-F Plots for the Whole Aircraft Model without Underwing Stores at  $M = 0.9$  Using the Linear Aerodynamic Approach.



**Figure 5.7** The Flutter Mode Shape of the Aircraft Model without Underwing Stores.

### 5.2.3. Aerodynamic Model # 3 at M = 0.90

The flutter calculation was repeated using the aerodynamic model # 3, i.e. the whole aircraft with underwing stores. The natural mode shapes are shown in Figure 5.8. The flutter calculation using the matched point method gave the flutter speed/frequency at  $V_f = 483$  KCAS /  $ff = 7.96$  Hz. If the structural damping is assumed to be  $g = 1.0\%$  than the flutter speed and frequency becomes  $V_f = 601$  KCAS and  $ff = 7.91$  Hz.

All of the previous calculations on the typical LCO case did not include the structural rigid body modes. If the anti-symmetric rigid body modes are included to the whole aircraft with store model, the similar procedures gave the flutter speed / frequency at  $V_f = 482$  KCAS /  $ff = 7.96$  Hz for  $g=0\%$ , and  $V_f = 593$  KCAS /  $ff = 7.91$  Hz for  $g = 1.0\%$ . These results are very close to the results of the model without rigid body modes. Therefore, for the typical LCO of the present case, the influence of the rigid body modes is not significant. Figure 5.9 shows the flutter v-g and V-f diagram for the aerodynamic model # 3. The flutter modes for several time steps is presented in Fig 5.10.

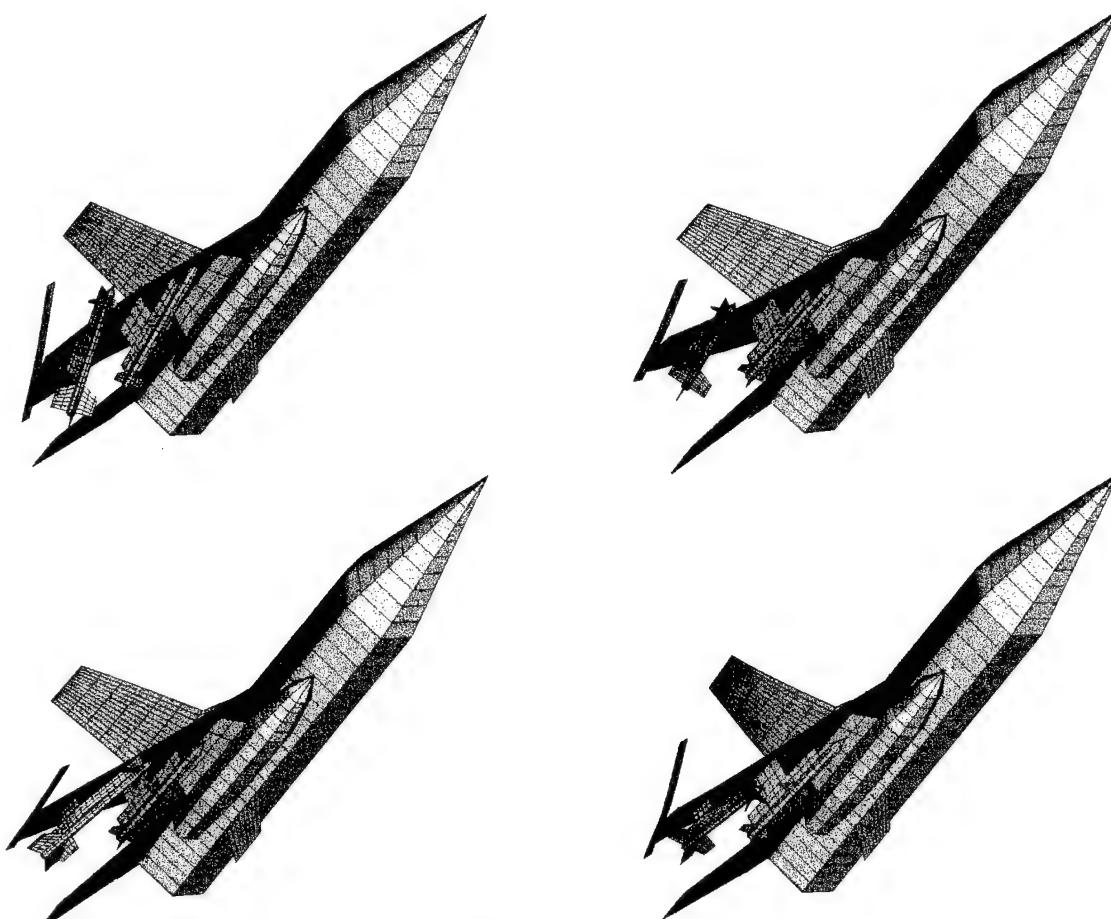
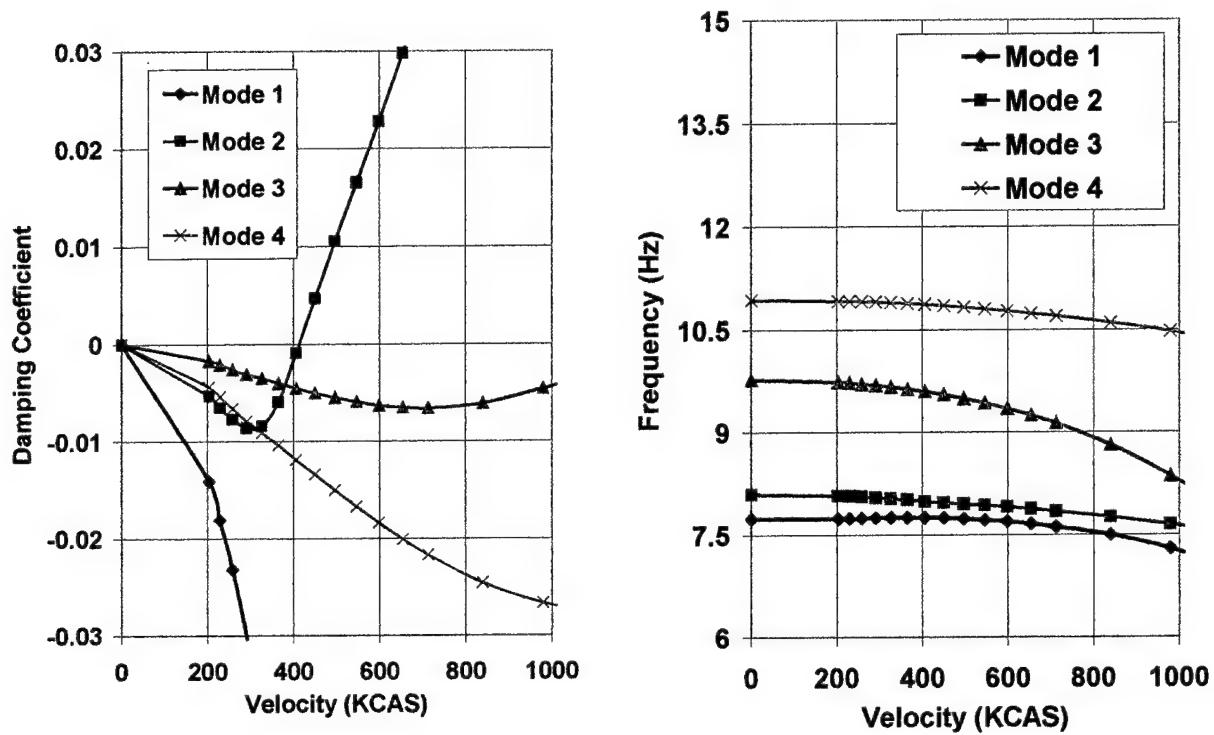
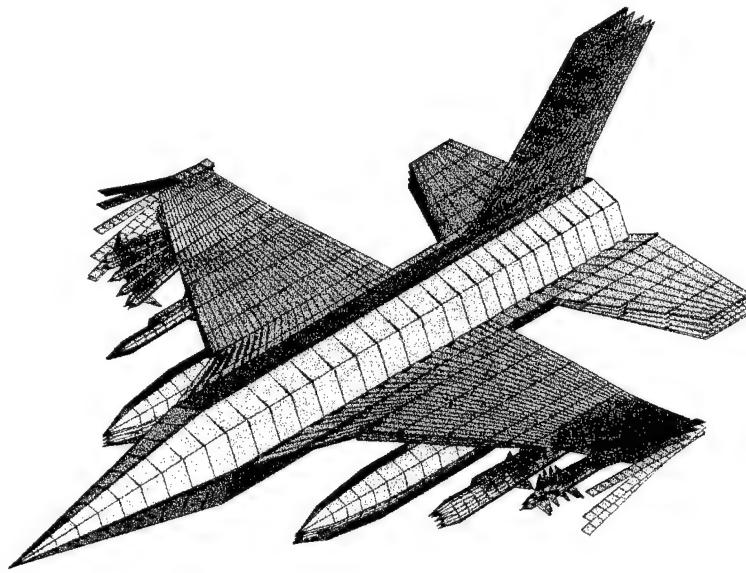


Figure 5.8 Vibration Modes of the Aircraft Model with Underwing Stores



**Figure 5.9 The Flutter V-g and V-f plots of the Whole Aircraft Model with Underwing Stores at  $M = 0.9$  Using the Linear Aerodynamic Approach.**



**Figure 5.10 The Flutter Mode Shape of the Whole Aircraft Model with Underwing Stores At  $M = 0.9$ .**

### 5.2.5. Aerodynamic Model # 3 at Mach 0.8 – 1.05

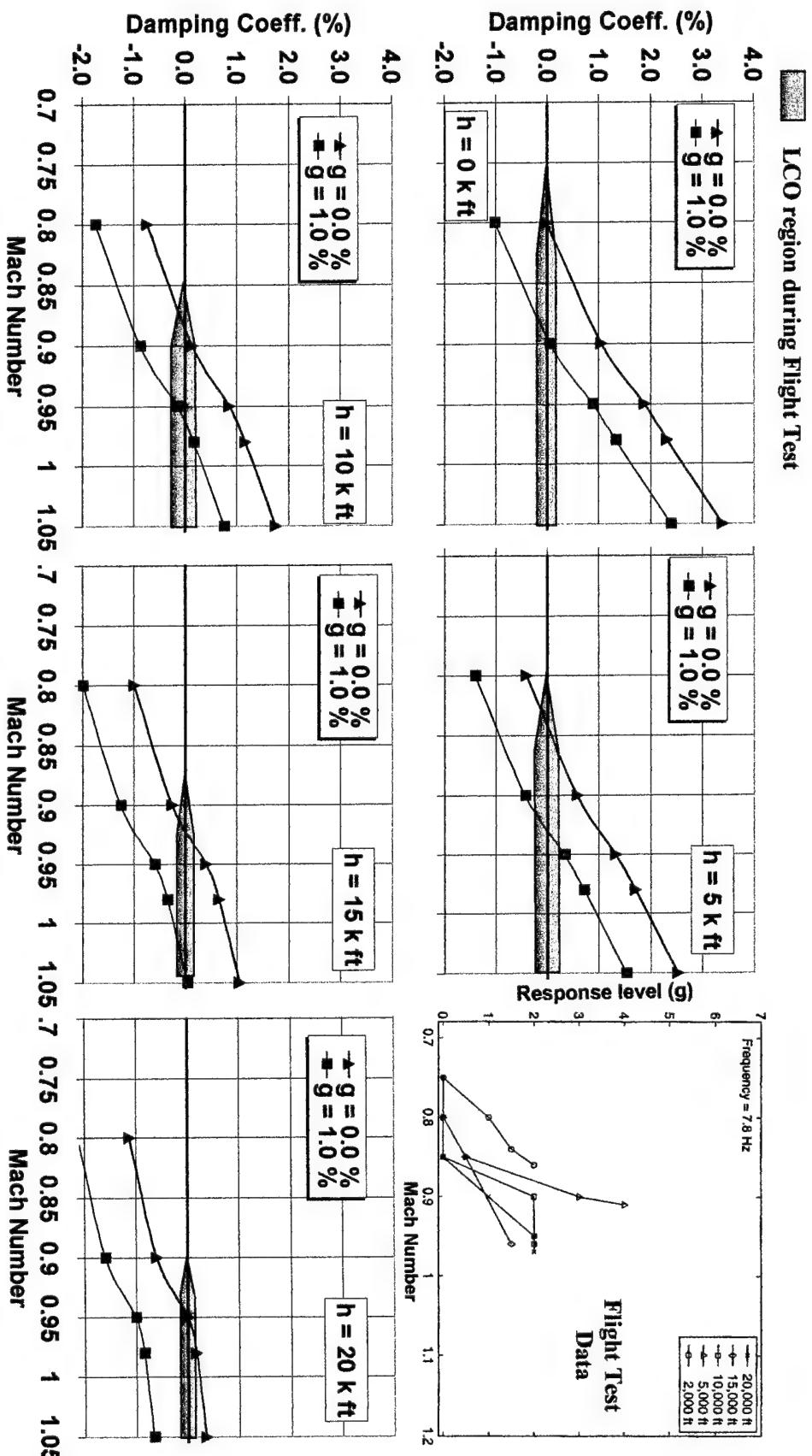
The flutter calculations for  $M = 0.90$  showed improvement on the solution results if a more refined aerodynamic model is used. However, previous results does not give a direct correlation between the flutter prediction and the flight test data. Note that, to indicate the flutter onset, the flight test data presents the measure acceleration response level in terms of Mach numbers and altitudes. Therefore, in order to correlate the numerical predictions with the flight test data, the calculation was repeated for several Mach numbers, including  $M = 0.80, 0.90, 0.95, 0.98$ , and  $1.05$ . The flutter solution is represented by the damping coefficient as a function of Mach number for each altitude. The critical speed and frequency for each Mach number are given in Table 5.2. Note that the correlation of the flutter prediction with the altitude is automatically generated by using the matched point option of the g-method.

The results presented in Fig 5.11. indicates that :

- at sea level, the linear aerodynamic approach gives a lower mach number than onset mach number of the flight test LCO data.
- at higher altitudes, the linear aerodynamic approach gives a higher mach number than the flight test data.

**Table 5.2 Critical Speed and Frequency Using the Linear Aerodynamic Approach (ZONA6/ZONA7)**

<i>Mach Number</i>	<i>Damping Coeff. g (%)</i>	<i>Flutter Speed (KCAS)</i>	<i>Flutter Frequency (Hz)</i>
<b>0.80</b>	0.0	534	7.95
	1.0	654	7.90
<b>0.90</b>	0.0	482	7.96
	1.0	593	7.91
<b>0.95</b>	0.0	431	7.97
	1.0	541	7.92
<b>0.98</b>	0.0	429	7.96
	1.0	526	7.92
<b>1.05</b>	0.0	450	7.93
	1.0	522	7.89



**Fig 5.11 Correlation between the Flutter Prediction Using the Linear Aerodynamic Approach (ZONA6/ZONA7) with Flight Test Data.**

### 5.3. Nonlinear Aerodynamic Approach

The flight test for the typical LCO configuration indicated that the aeroelastic instability for this case occurred between 0.75 and 1.1, *i.e.* in transonic regime where the nonlinear behavior of the aerodynamic flow may significantly influence the critical speed. To investigate the flutter calculation in this transonic regime, a nonlinear aerodynamic approach based on the ZTAIC method was used for the prediction of the unsteady aerodynamic data. The steady aerodynamic data was provided by Denegri of Eglin Airforce Base as shown in Section 3. Flutter calculation was conducted to the whole aircraft with stores for Mach numbers ranging between 0.80 and 1.05. The rigid body modes were included in the structural dynamic calculations.

#### 5.3.1 Aerodynamic Model # 3 at M = 0.90

The flutter calculation for  $M = 0.90$  using the matched point method gave the flutter speed/frequency at  $V_f = 468 \text{ KCAS}$  /  $f_f = 7.97 \text{ Hz}$ . Note that there is no second critical speed in this third model. If the structural damping is assumed to be  $g = 1.0\%$ , the flutter speed and frequency becomes  $V_f = 588 \text{ KCAS}$  and  $f_f = 7.93 \text{ Hz}$ . Compare to the results based on the linear aerodynamic approach given in Table 5.1, the present result using the nonlinear aerodynamic approach is closer to the flight test data. Figure 5.12 shows the V-g and V-f plot for Mach 0.90. The associated flutter mode is presented in Fig 5.13.

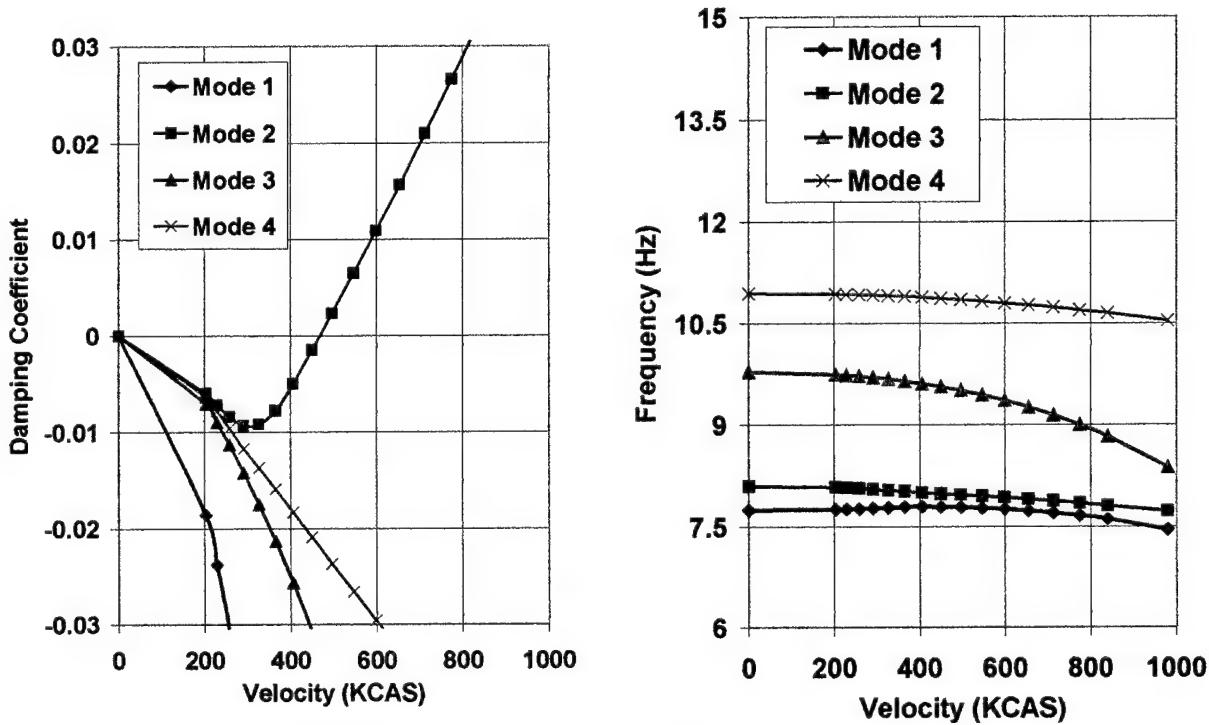
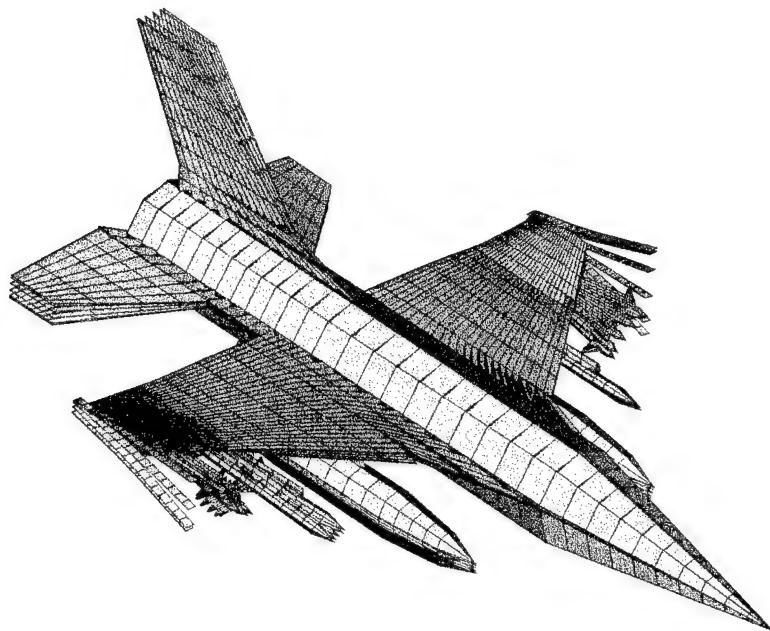


Figure 5.12 The Flutter V-G and V-F Plots of the Whole Aircraft Model with Underwing Stores at  $M = 0.9$  Using the Nonlinear Aerodynamic Approach.



**Figure 5.13 The Flutter Mode Shape of the Whole Aircraft Model with Underwing Stores at  $M = 0.9$  Calculated Using the Non Linear Aerodynamic Method**

### 5.3.2. Aerodynamic Model # 3 at $M = 0.80 - 1.05$

In order to correlate the numerical predictions with the flight test data, the calculation for the nonlinear aerodynamic approach was repeated for several Mach numbers, namely  $M = 0.80$ ,  $0.90$ ,  $0.95$ ,  $0.98$ , and  $1.05$ . The flutter solution is represented by the damping coefficient and Mach number as well as the altitudes. The critical speed and frequency for each Mach number are given in Table 5.3. The results presented in Fig 5.15 shows that:

- ZTAIC predicts non-explosive damping of the unstable modes for all altitudes.
- In the post-flutter region, it is very likely that the nonlinearity-induced stable damping (from either the structures or aerodynamics, if any) can nullify the unstable damping and stop the growth of the amplitude, leading to LCO.
- Similar to the classical flutter case, the on-set of LCO is very sensitive to the linear structural damping level.

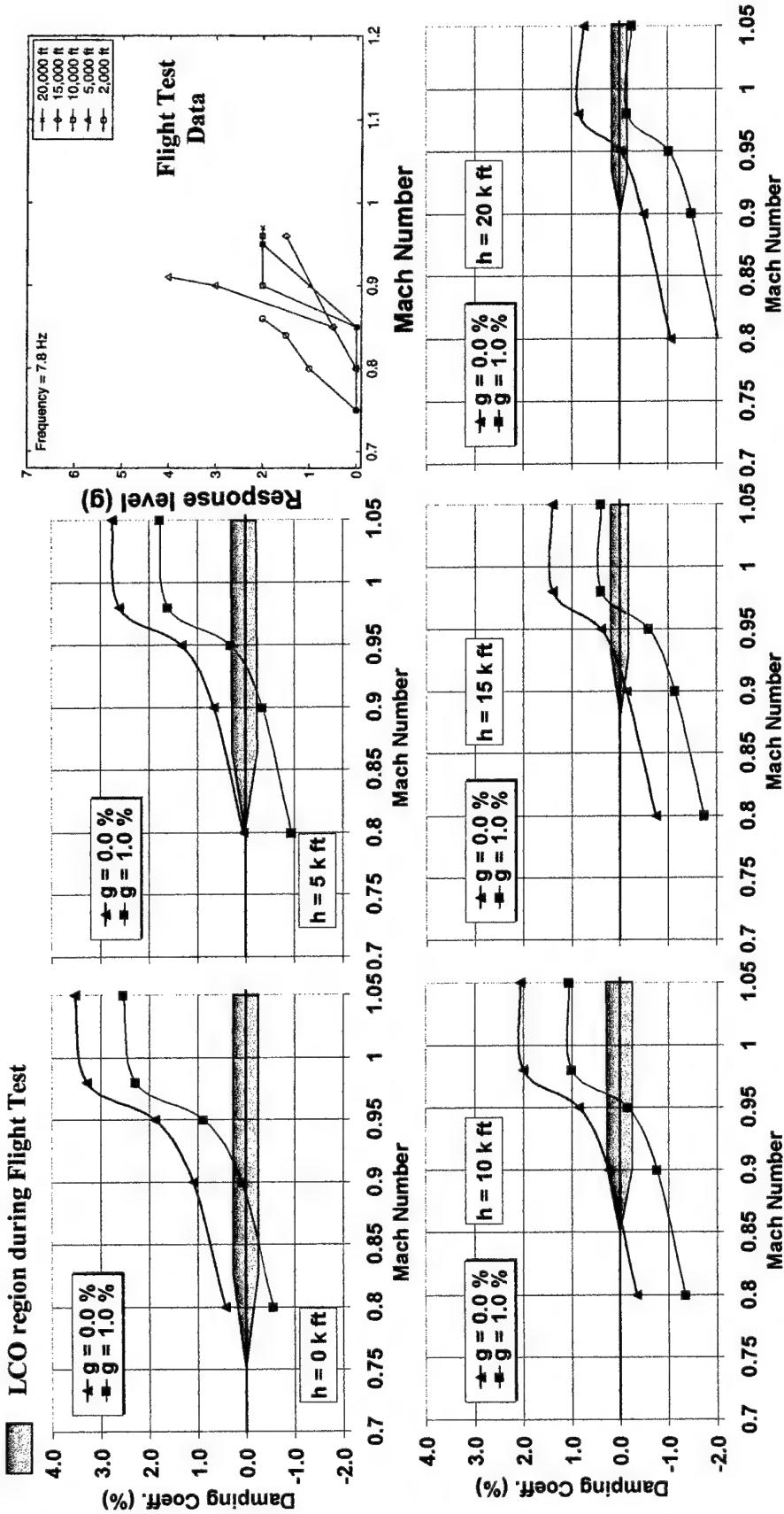


Figure 5.14 The Correlation between the Flutter Prediction using the Nonlinear Aerodynamic Approach (ZTAIC) and the Flight Test Data.

**Table 5.3 Critical speed and Frequency Using the Nonlinear Aerodynamic Approach (ZTAIC).**

<i>Mach Number</i>	<i>Damping Coeff. g (%)</i>	<i>Flutter Speed (KCAS)</i>	<i>Flutter Frequency (Hz)</i>
<b>0.80</b>	0.0	480	7.97
	1.0	606	7.95
<b>0.90</b>	0.0	468	7.97
	1.0	588	7.93
<b>0.95</b>	0.0	409	7.99
	1.0	525	7.95
<b>0.98</b>	0.0	372	8.00
	1.0	455	7.98
<b>1.05</b>	0.0	422	7.94
	1.0	494	7.92

## SECTION 6

### CORRELATION OF THE F-16 / STORE NON-TYPICAL LCO PREDICTIONS WITH FLIGHT TEST DATA

#### 6.1 Flight Test Result and Previous Numerical Prediction

Reference 1 described that a non-typical LCO response occurred during the flight test of F-16 with the store configurations shown in Table 3.1. The instability response was characterized by a gradual onset of sustained limited amplitude wing oscillations where the oscillation amplitude does not progressively increase with increasing Mach number (Ref 1). The oscillation may be present only in a limited portion of the flight envelope. The measured oscillatory wing tip response during level flight at five altitude is shown in Figure 3.3. The response behavior of this configuration was only sensitive in 0.88 – 0.94 Mach range. The instability response was antisymmetric at a frequency of 8.2 Hz for all altitudes.

An attempt to predict this non-typical LCO case has been conducted by Denegri in Refs 1 and 18. The calculation was performed at  $M = 0.90$ . The aerodynamic model used in Refs 1 and 18 is an isolated wing with tip launcher only, *i.e.* the same as the aerodynamic model # 1 of the present work as shown in Fig 6.1. No aerodynamic modeling of fuselage, empennage and underwing stores is included. The only influence of the fuselage, empennage and stores considered in the flutter analysis is their effect on structural modal characteristics. The flutter calculation was conducted using the non-matched point method. The critical speed and frequency are  $V_f = 393$  KCAS and  $f_f = 8.26$  Hz for the structural damping  $g = 0\%$ . The result indicates that the flight test frequency is well correlated with the critical mode frequency. However, the calculated critical speed was higher than the flight test data as shown in Table 4.1

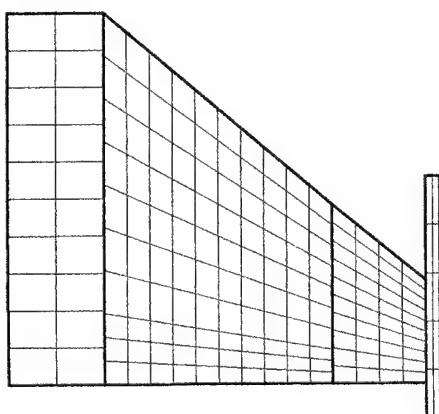


Figure 6.1 Aerodynamic Model # 1 for the Nontypical LCO case

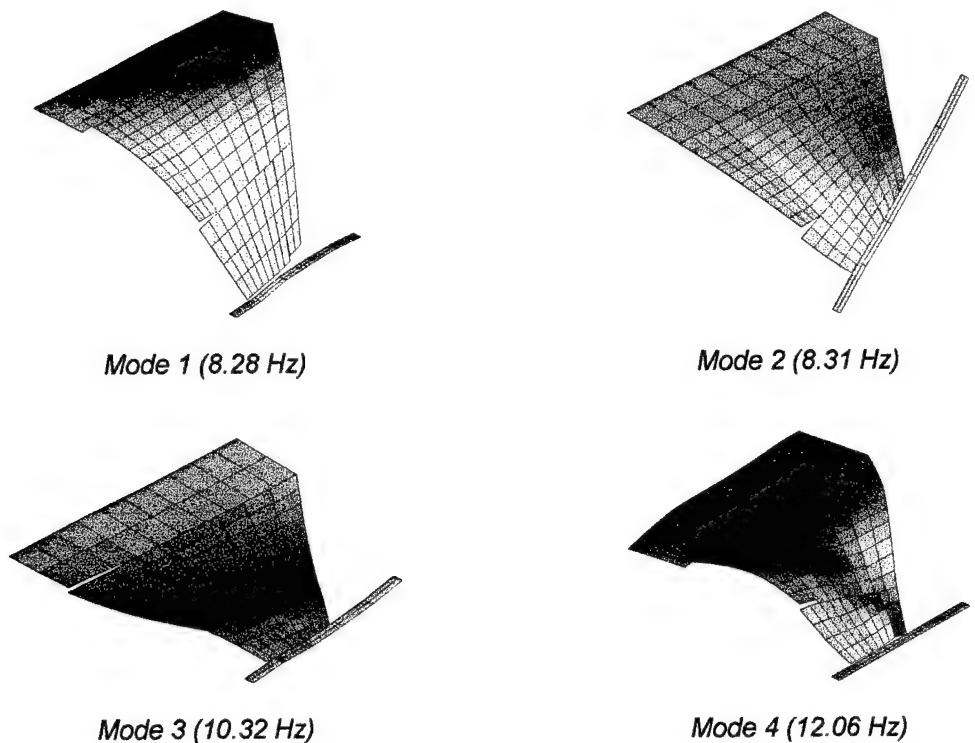
## 6.2 Linear Aerodynamic Approach

### 6.2.1 Aerodynamic Model # 1

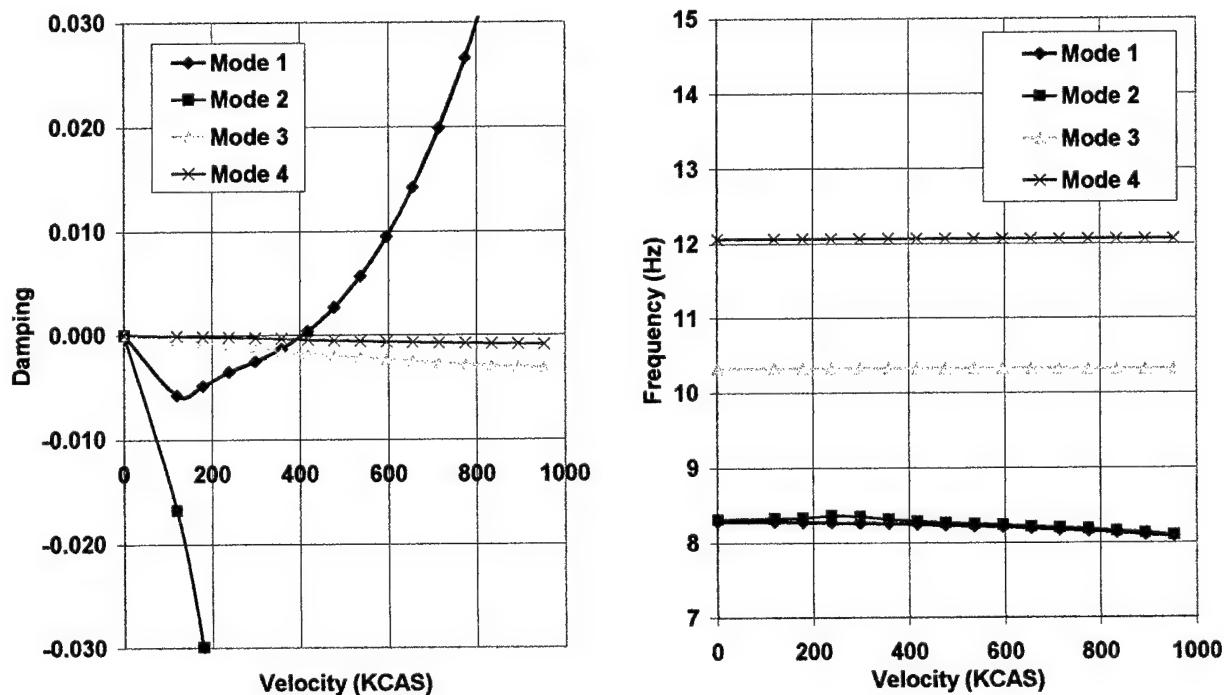
The first aerodynamic model of the present work is the isolated wing with tip launcher (Figure 6.1), *i.e* the same as the model used in Ref 17. Figures 6.2 show the first four natural (undamped) mode shapes. Employing a non-matched point flutter analysis of ZAERO at  $M=0.90$  and sea level density, the critical speed was found to be  $V_f = 403$  KCAS and flutter frequency was  $f_f = 8.24$  Hz for the structural damping  $g = 0\%$ . For the structural damping  $g = 1\%$ , the critical speed and frequency are  $V_f = 602$  KCAS and  $f_f = 8.21$  respectively. These results are very close to the analysis results in Refs 1 and 18 as shown in Table 6.1 and Fig 6.3. Figure 6.4 shows the flutter mode shape at several time steps. The  $V-g$  and  $V-f$  plots of the present flutter analysis given in Fig 6.4 show similar results to Fig 12 of Ref 17.

**Table 6.1 Flutter Results Using Linear Aerodynamics at  $M = 0.9$ .**

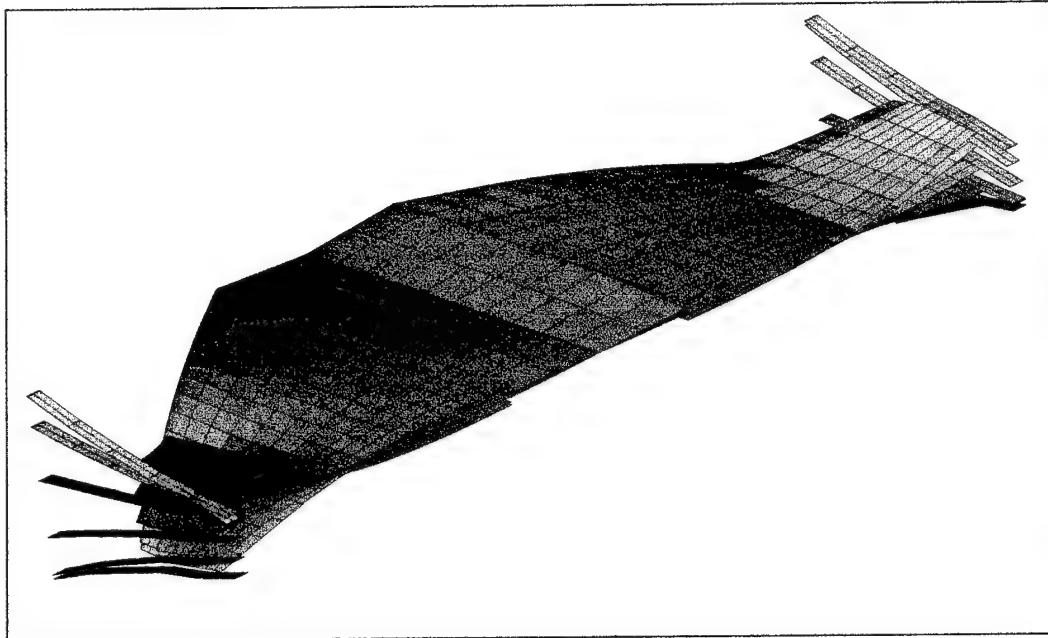
Aerodynamic Model or Methods	Flutter Speed (KCAS)	Flutter Frequency (Hz)
Flight test (on set of flutter speed)	560	8.2
Denegri's DLM results (Aerodynamic Model # 1: Wing + tip launcher only, non matched point, $g = 0\%$ )	393	8.26
Aerodynamic Model # 1: Wing + tip launcher only, (non matched point)	$g = 0\%$	403
	$g = 1\%$	602
Aerodynamic Model # 2: Whole aircraft without underwing stores (matched point)	$g = 0\%$	508
	$g = 1\%$	678
Aerodynamic Model # 3: Whole aircraft with stores (matched point)	$g = 0\%$	471
	$g = 1\%$	690
Aerodynamic Model # 3: Whole aircraft with stores but without rigid body modes (matched point)	$g = 0\%$	642
	$g = 1\%$	796



**Figure 6.2 Vibration Modes of Aerodynamic Model # 1.**



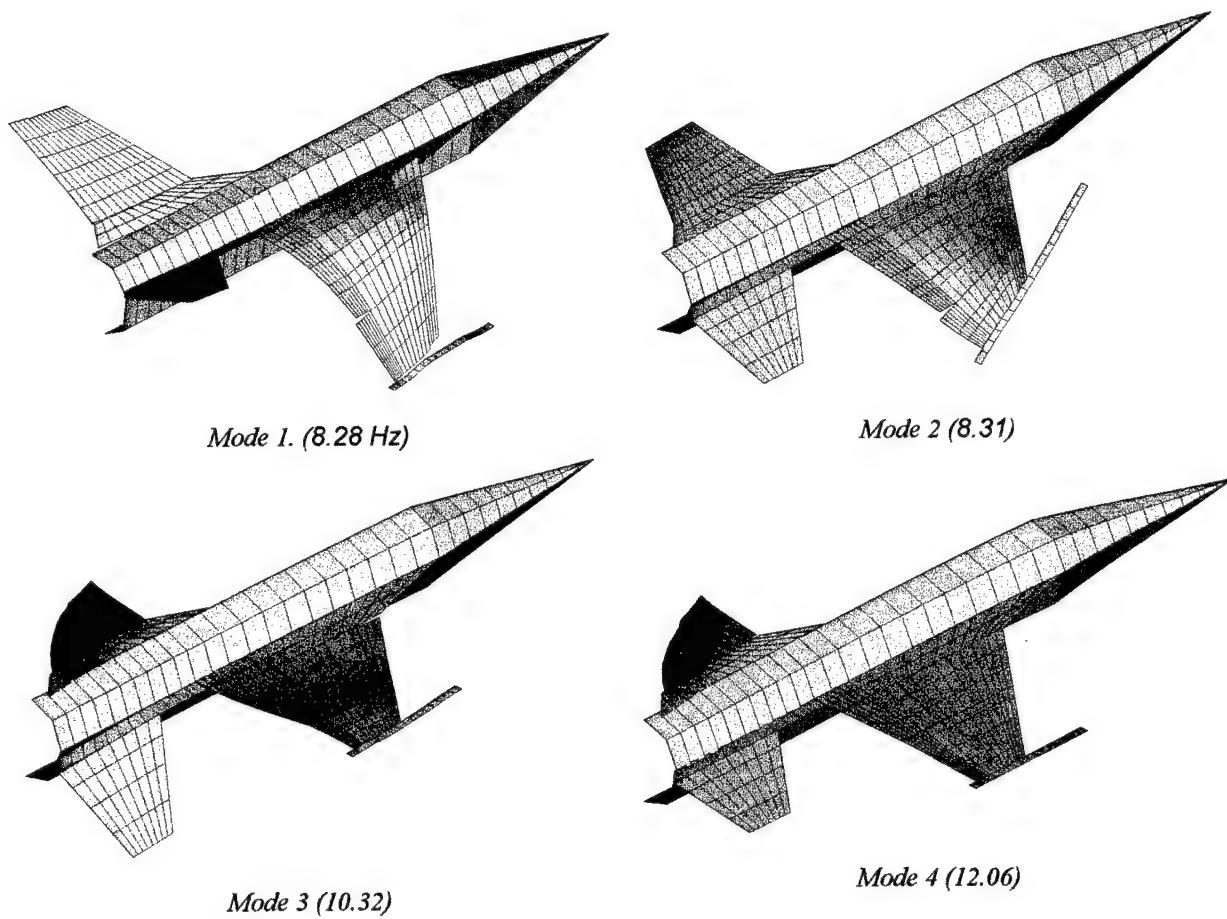
**Figure 6.3 The Flutter V-g and V-f plots for Wing-tip Launcher Only Model at  $M = 0.9$  Using the Linear Aerodynamic Approach.**



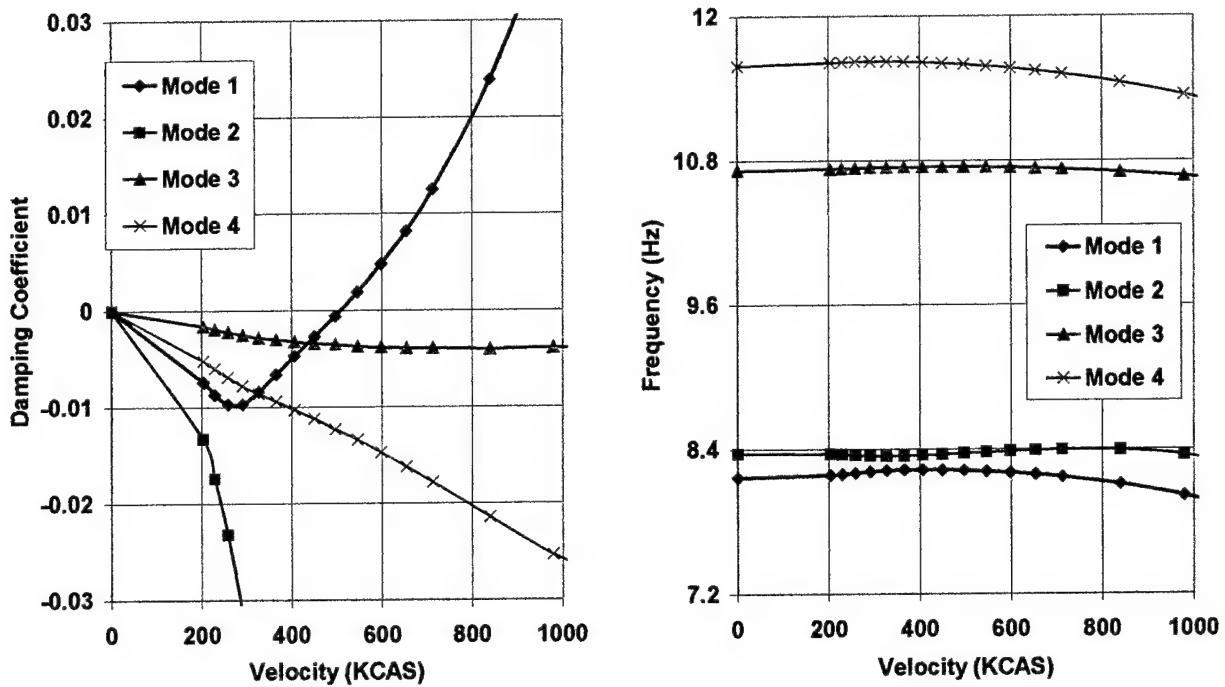
**Figure 6.4 The Flutter Mode Shape of the Wing-Tip Launcher Only Model.**

### 6.2.2 Aerodynamic Model # 2

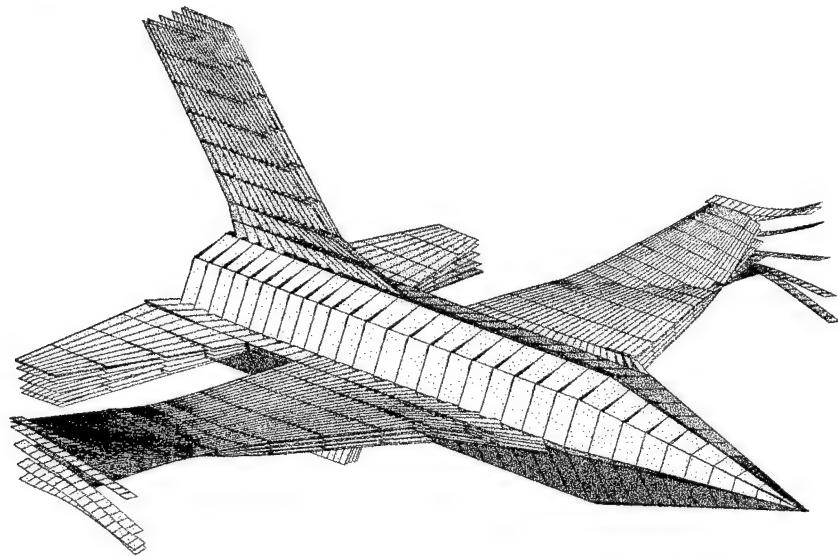
The flutter calculation was repeated using the aerodynamic model # 2, i.e. the whole aircraft without underwing stores. The flutter calculation using the matched point method gave the flutter speed/frequency at  $V_f = 508 \text{ KCAS} / f_f = 8.22 \text{ Hz}$ . If the structural damping is assumed to be  $g = 1.0\%$ , than the flutter speed and frequency becomes  $V_f = 678 \text{ KCAS}$  and  $f_f = 8.18 \text{ Hz}$ . The result for this configuration shows that the inclusion of the fuselage and empennage aerodynamic model improves the result, i.e. closer to the flight test data.



**Figure 6.5 Vibration Modes of the Aircraft Model without Underwing Stores.**



**Figure 6.6 The Flutter V-g and V-f Plots for the Whole Aircraft Model without Underwing Stores at  $M = 0.9$  Using The Linear Aerodynamic Approach.**



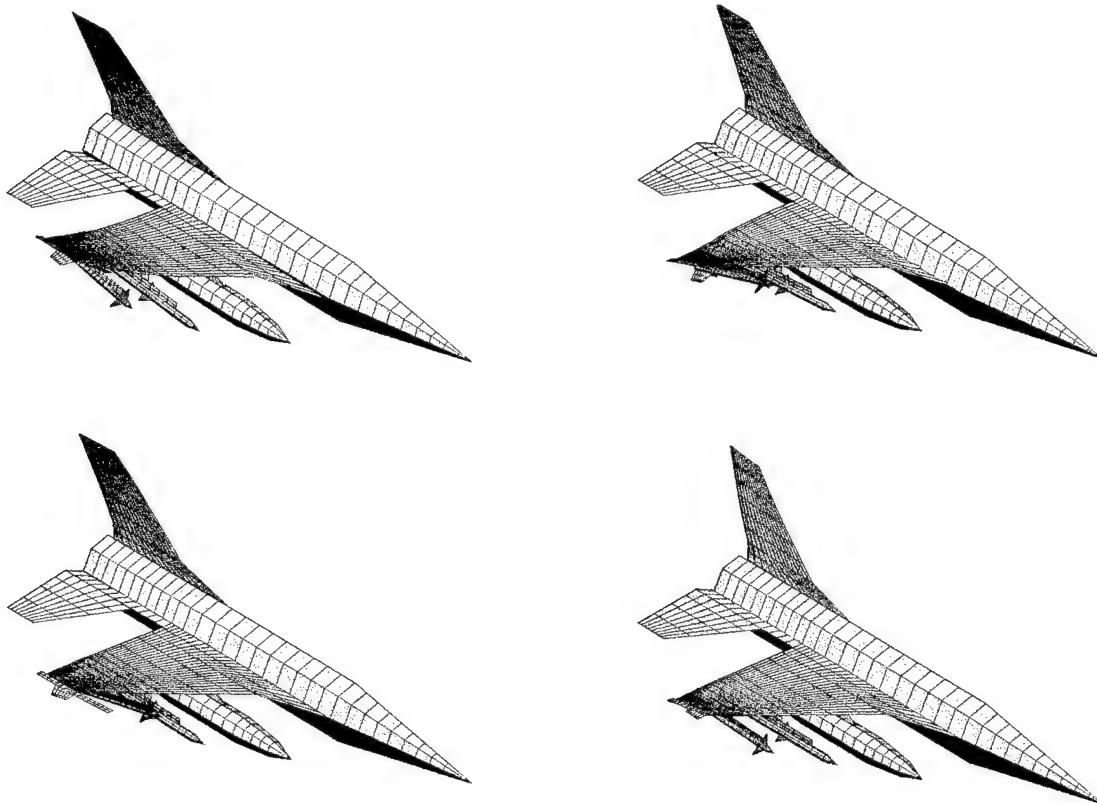
**Figure 6.7 The Flutter Mode Shape of the Aircraft Model without Underwing Stores**

### 6.2.3 Aerodynamic Model # 3 at $M = 0.90$

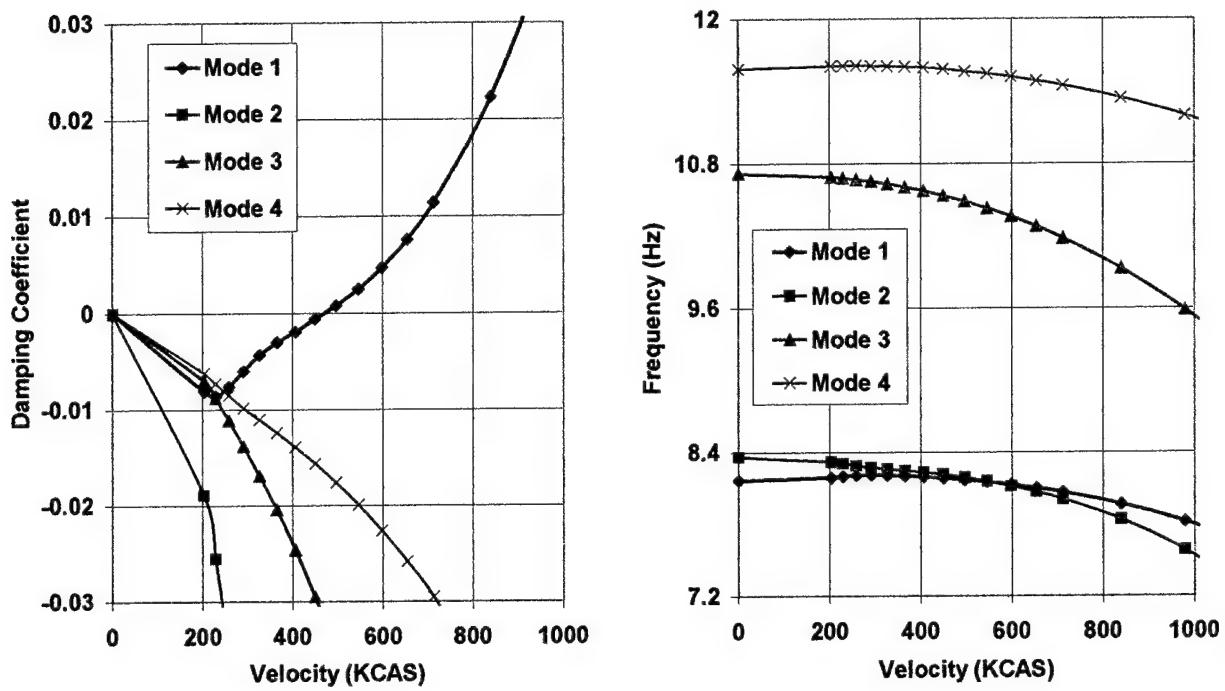
The flutter calculation was repeated using the aerodynamic model # 3, i.e. the whole aircraft with underwing stores. The natural mode shapes are shown in Figure 6.8. The flutter calculation

using the matched point method gave the flutter speed/frequency at  $V_f = 642$  KCAS /  $f_f = 8.13$  Hz. Note that there is no second critical speed in this third model. If the structural damping is assumed to be  $g = 1.0\%$  than the flutter speed and frequency becomes  $V_f = 796$  KCAS and  $f_f = 8.03$  Hz. Clearly, the result for this configuration is closer to the flight test data as shown in Table 6.1.

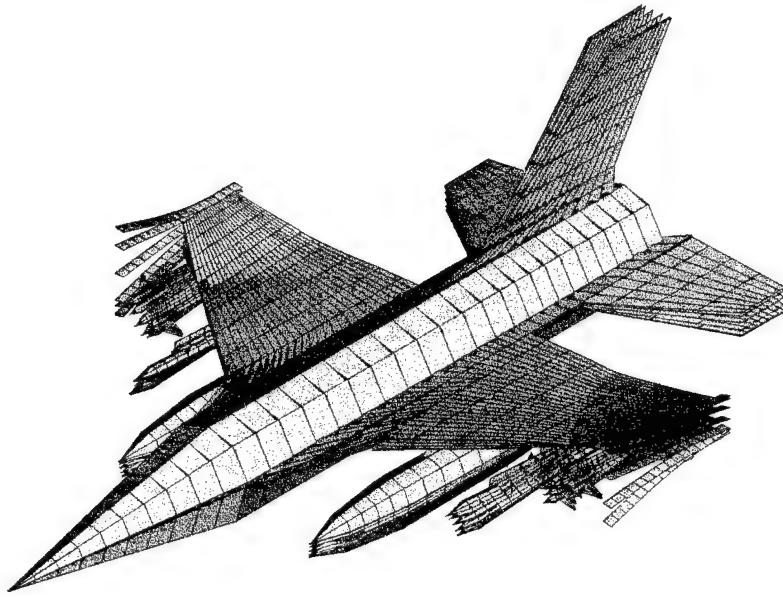
All of the previous calculations on the non-typical LCO did not include the structural rigid body modes. If the anti-symmetric rigid body modes are included to the whole aircraft with store model, the similar procedures gave the flutter speed / frequency at  $V_f = 471$  KCAS /  $f_f = 8.18$  Hz for  $g=0\%$ , and  $V_f = 690$  KCAS /  $f_f = 8.08$  Hz for  $g = 1.0\%$ . These results are very close to the results of the model without rigid body modes. Therefore, for the classical flutter of the present case, the influence of the rigid body modes is not significant. Figure 6.9 shows the flutter V-g and V-f diagram for the aerodynamic model # 3. The flutter modes for several time steps is presented in Fig 6.10.



**Figure 6.8 Vibration Modes of the Aircraft Model with Underwing Stores.**



**Figure 6.9 The Flutter V-g and V-f plots of the Whole Aircraft Model with Underwing Stores at  $M = 0.9$  Using the Linear Aerodynamic Approach.**



**Figure 6.10 The Flutter Mode Shape of the Whole Aircraft Model with Underwing Stores at  $M = 0.9$ .**

#### 6.2.4 Aerodynamic Model # 3 at Mach 0.8 – 1.05

The flutter calculations for  $M = 0.90$  showed improvement on the solution results if a more refined aerodynamic model is used. However, previous results does not give a direct correlation between the flutter prediction and the flight test data. Note that, to indicate the flutter onset, the flight test data presents the measure acceleration response level in terms of Mach numbers and altitudes. Therefore, in order to correlate the numerical predictions with the flight test data, the calculation was repeated for several Mach numbers, namely  $M = 0.80, 0.90, 0.95, 0.98$ , and  $1.05$ . The flutter solution is represented by the damping coefficient as a function of Mach number for each altitude. The critical speed and frequency for each Mach number are given in Table 6.2. The results presented in Fig 6.11. shows that

- Linear aerodynamic approach (ZONA6/ZONA7) predicts non-explosive damping of the unstable mode in all altitudes.
- For the altitude lower than 15,000 ft, the flutter onset Mach number of the flight test data was correlated very well with the linear aerodynamic approach if the structural damping is assumed to be 1%.
- For the altitude of 15,000 ft and higher, the onset Mach number of the flight test data was occurred near  $M = 0.98$  and  $1.02$  where the nonlinearity effect of the transonic aerodynamic is significant. Therefore, the linear aerodynamic approach gives a higher prediction of the onset Mach number for these altitudes.

**Table 6.2 Critical Speed and Frequency Using ZONA6/ZONA7  
(Linear Aerodynamic Approach).**

<i>Mach Number</i>	<i>Damping Coeff. g (%)</i>	<i>Flutter Speed (KCAS)</i>	<i>Flutter Frequency (Hz)</i>
<b>0.80</b>	0.0	576	8.15
	1.0	778	8.03
<b>0.90</b>	0.0	571	8.17
	1.0	615	8.08
<b>0.95</b>	0.0	451	8.17
	1.0	656	8.08
<b>0.98</b>	0.0	474	8.17
	1.0	660	8.08
<b>1.05</b>	0.0	376	8.20
	1.0	573	8.11

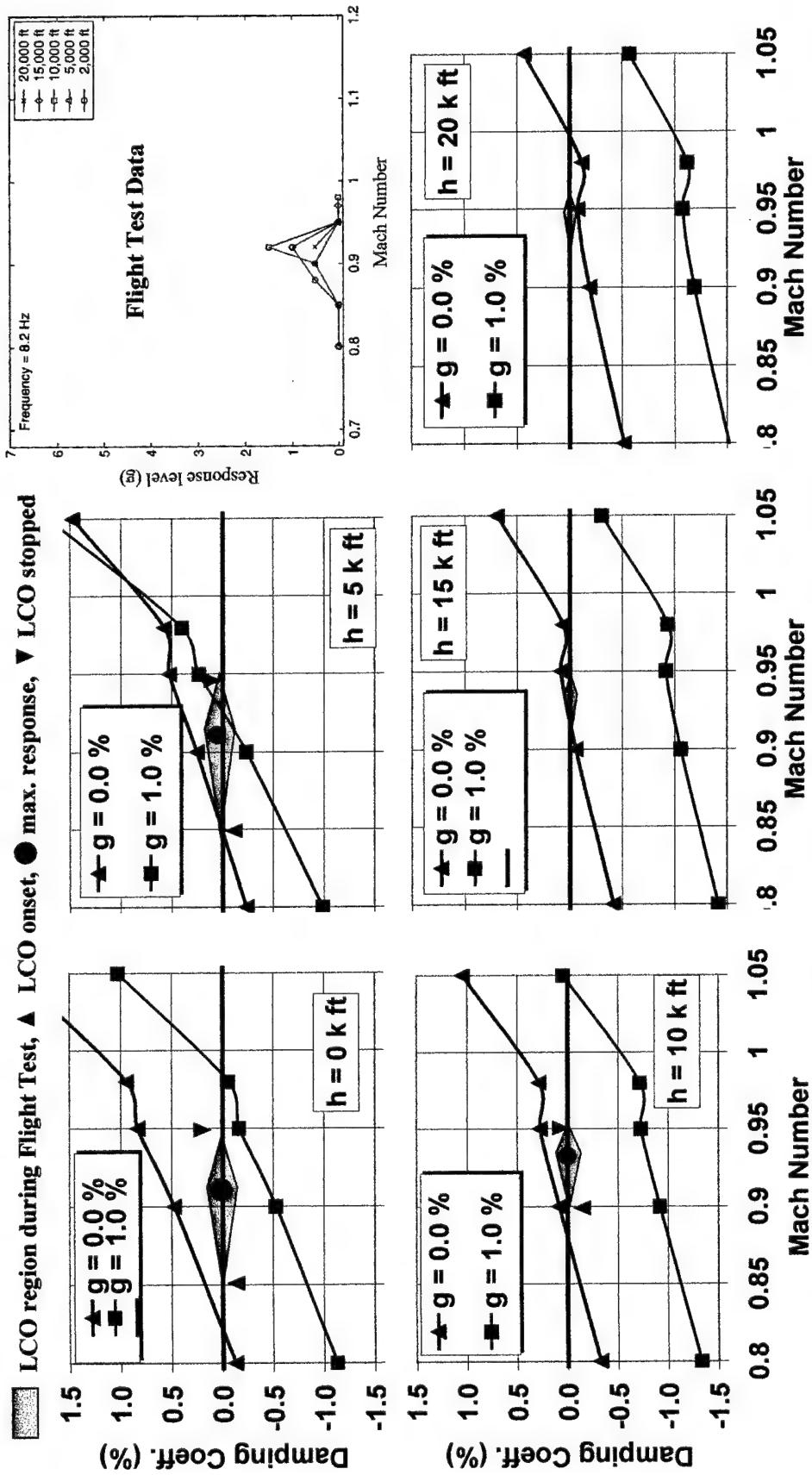


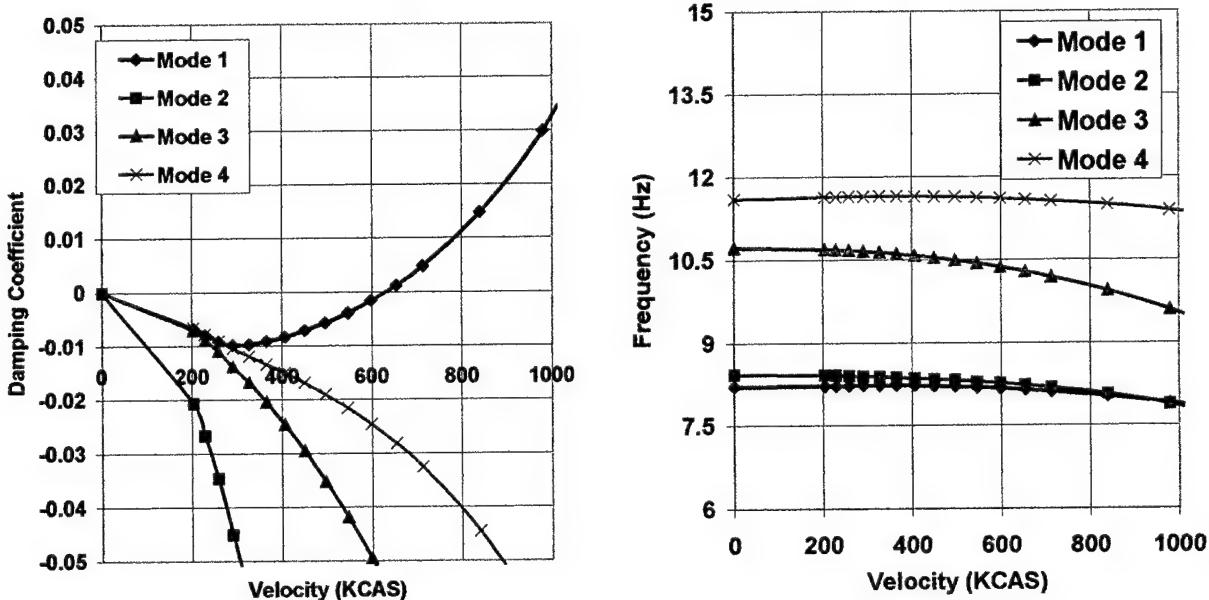
Figure 6.11 Correlation between the Flutter Prediction using the Linear Aerodynamic Approach (ZONA6/ZONA7) with Flight Test Data of the Classical Flutter Case.

### 6.3 Nonlinear Aerodynamic Approach

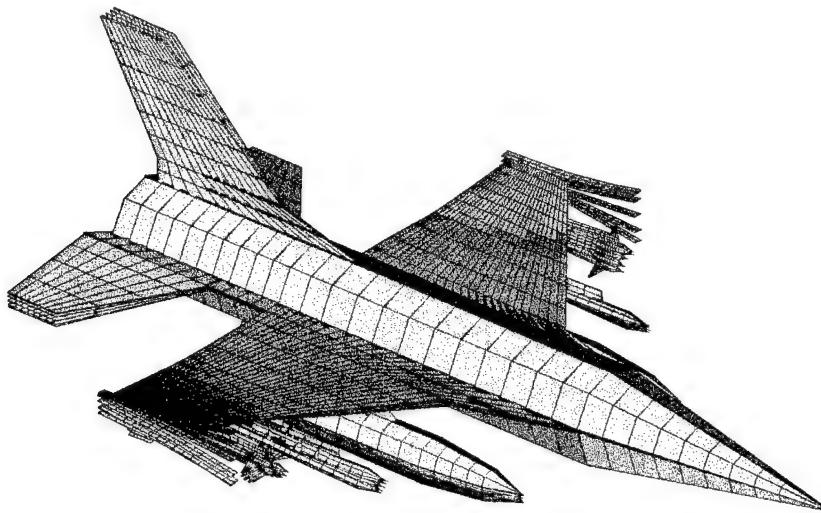
The flight test for the non-typical LCO configuration indicated that the aeroelastic instability for this case occurred between 0.85 and 1.1, i.e. in transonic regime where the nonlinear behavior of the aerodynamic flow may significantly influence the critical speed. To investigate the flutter calculation in this transonic regime, a nonlinear aerodynamic approach based on the ZTAIC method was used for the prediction of the unsteady aerodynamic data. The steady aerodynamic data was provided by Ref 20 as shown in section 3. Flutter calculation was conducted to the whole aircraft with stores for Mach numbers ranging between 0.80 and 1.05. The rigid body modes were included in the structural dynamic calculations.

#### 6.3.1 Aerodynamic Model # 3 at $M = 0.90$

The flutter calculation for  $M = 0.90$  using the matched point method gave the flutter speed/frequency at  $V_f = 630 \text{ KCAS} / f_f = 8.16 \text{ Hz}$ . If the structural damping is assumed to be  $g = 1.0\%$ , the flutter speed and frequency becomes  $V_f = 595 \text{ KCAS}$  and  $f_f = 8.18 \text{ Hz}$ . Compared to the results based on the linear aerodynamic approach given in Table 6.1, the present result using the nonlinear aerodynamic approach is closer to the flight test data. Figure 6.12 shows the V-g and V-f plot for Mach 0.90. The associated flutter mode is presented in Fig 6.13.



**Figure 6.12 The Flutter V-g and V-f Plots of the Whole Aircraft Model with Underwing Stores at  $M = 0.9$  Using the Nonlinear Aerodynamic Approach.**

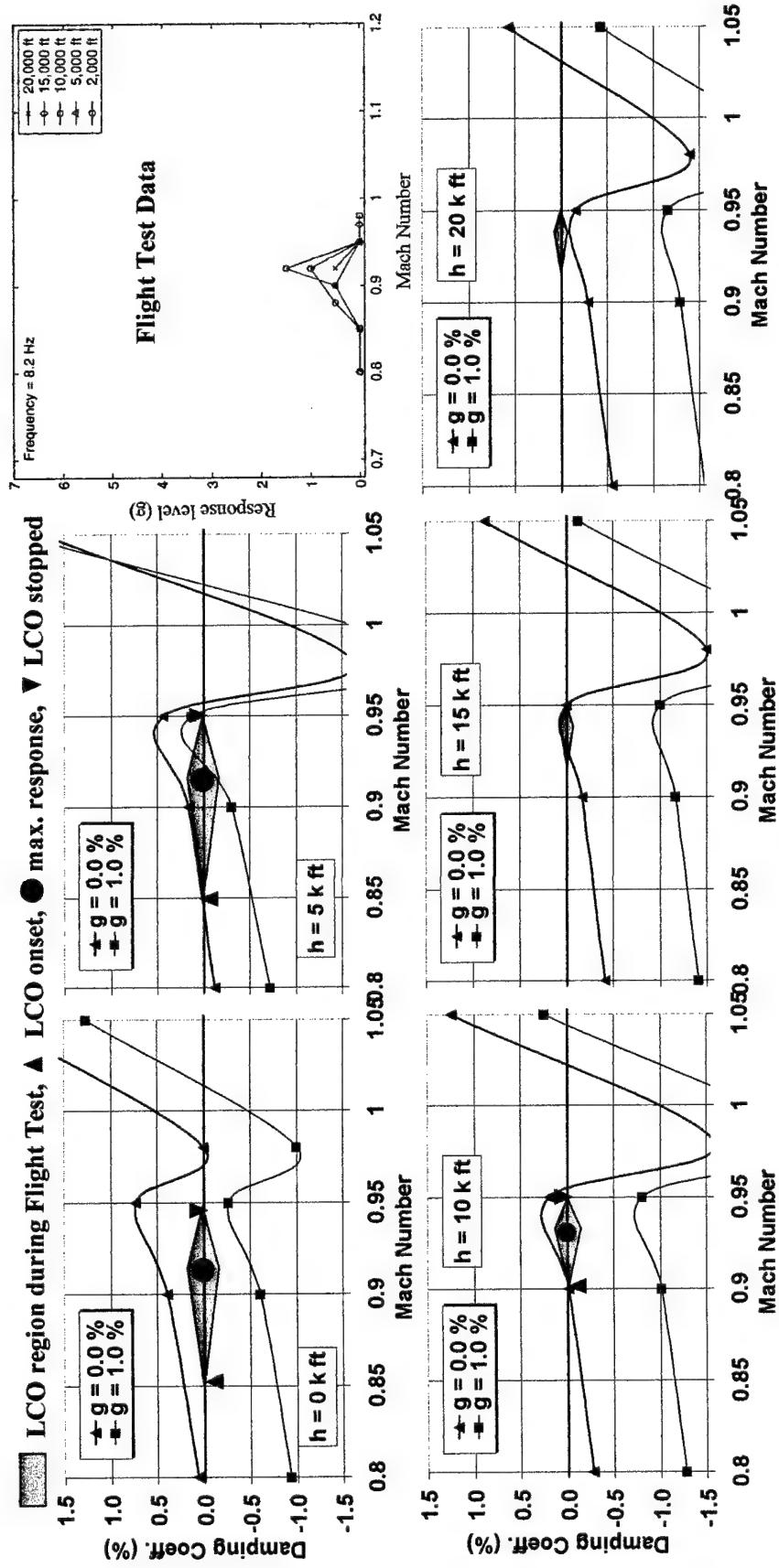


**Figure 6.13 The Flutter Mode Shape of the Whole Aircraft Model with Underwing Stores at  $M = 0.9$  Calculated Using the Non Linear Aerodynamic Method.**

### **6.3.2 Aerodynamic Model # 3 at $M = 0.80 - 1.05$**

In order to correlate the numerical predictions with the flight test data, the calculation for the nonlinear aerodynamic approach was repeated for several Mach numbers, namely  $M = 0.80$ ,  $0.90$ ,  $0.95$ ,  $0.98$ , and  $1.05$ . The rigid body modes were included in the calculations. Figure 6.14 shows the flutter solution represented by the damping coefficient as a function of Mach number for several altitudes. Table 6.3 shows the critical speed and frequency for each Mach number. The results presented in Fig 6.14. indicate that:

- ZTAIC, i.e. the nonlinear aerodynamic approach, predicts the hump flutter modes in all altitudes, i.e. the aeroelastic system is unstable before  $M = 0.95$ , but becomes stable between  $M=0.95$  and  $M=1.0$ .
- Similar to the classical flutter and the typical LCO cases, the on-set of LCO is very sensitive to the linear structural damping level. But, because of the sudden increase of the stable damping at  $M=0.98$ , the condition where LCO disappears is relatively insensitive to the structural damping.
- The above shows that indeed ZTAIC can provide correct trend for predicting the non-typical LCO case.



**Figure 6.14** The Correlation between the Flutter Prediction using the Nonlinear Aerodynamic Approach (ZTAIC) and the Flight Test Data.

**Table 6.3 Critical speed and Frequency Using ZTAIC  
(Nonlinear Aerodynamic Approach).**

<i>Mach Number</i>	<i>Damping Coeff. g (%)</i>	<i>Flutter Speed (KCAS)</i>	<i>Flutter Frequency (Hz)</i>
<b>0.80</b>	0.0	616	8.19
	1.0	752	8.12
<b>0.90</b>	0.0	630	8.16
	1.0	595	8.18
<b>0.95</b>	0.0	475	8.18
	1.0	672	8.09
<b>0.98</b>	0.0	1127	8.00
	1.0	1195	8.00
<b>1.05</b>	0.0	365	8.21
	1.0	543	8.16

## SECTION 7

### CONCLUSIONS AND FUTURE WORK

We have successfully investigated the accuracy of the ZAERO aeroelastic software system to predict various types of flutter and limit cycle oscillations (LCO) and developed a massive store management (MSM) system as a platform for a rapid assessment of flutter/LCO (RAFEL) software system for massive aircraft/store configurations.

To test the capability of ZAERO, a number of aircraft/store configurations with various structure and aerodynamic modeling are used in subsonic, transonic and supersonic flight regimes using linear and nonlinear unsteady aerodynamic procedures of ZAERO. Three different F-16 with store configurations were used to identify various categories of aeroelastic instability responses including classical flutter, typical LCO and non-typical LCO. According to Reference 1, these categories are representative of the wide variety of aeroelastic responses encountered by fighter aircraft with external stores.

To accurately predict the flutter/LCO onset speed and frequency at various flight altitudes, the matched point option of the g-method, a robust aeroelastic solver of ZAERO, was used. The procedure is important to correlate directly the flutter/LCO prediction in terms of flight altitude and Mach number with the flight test data.

The influence of structural rigid body modes on aeroelastic instability was investigated. The result shows that the influence is small for classical flutter and typical LCO cases, but can be significant for the non-typical LCO case. The inclusion of the structural rigid body modes in the aeroelastic analysis adds very small fraction of computational time but increase the accuracy of the result. Therefore, it is recommended to include the rigid body modes in the flutter/LCO prediction.

The influence of linear and nonlinear unsteady aerodynamic methods to discern differences between classical flutter, typical LCO and non-typical LCO was investigated. By using ZONA6/ZONA7 of ZAERO for a linear aerodynamic approach, the classical flutter case has been successfully identified. By using ZTAIC of ZAERO for a nonlinear aerodynamic approach, the differences between typical and non-typical LCO cases as well as classical flutter case have been successfully predicted including the oscillation frequency and onset velocity of the instability response.

The influence of various aerodynamic modeling of stores and whole aircraft, including fuselage, wing and horizontal/vertical tails, was investigated. The simplest aerodynamic model, i.e. the wing with tip launcher only, is capable to identify the oscillation frequency of flutter/LCO, but fails to predict the onset velocity. The use of more refined aerodynamic model including the whole aircraft and stores successfully improves the prediction and provides a well correlation with the flight test data. Therefore, the store aerodynamic modeling is important for accurate prediction of the flutter/LCO.

To anticipate the increase of computational time due to the additional aerodynamic model of massive aircraft/store configurations, a rapid aeroelastic computational scheme was designed using ZAERO as the basic software system. The rapid computational scheme is based on the strategy to re-use the aerodynamic influence coefficient (AIC) data, which is the most time consuming part in aeroelastic computation, and based on an efficient massive data management system to rapidly store and recall the AIC data. A scheme to utilize various parts of ZAERO, including ZONA6, ZONA7, ZTAIC, the g-method package and spline modules, has been designed to substantially increase the computational efficiency of ZAERO for the massive aircraft/store flutter/LCO assessment.

The achievement of the Phase I objectives has paved the way and has provided considerable technical insight for future implementation of the RAFEL software system in aircraft/store flutter clearance. Consequently, it leads to a well-conceived plan for a Phase II development. The proposed tasks to be conducted in Phase II include:

*Implementation of the proposed RAFEL software system:*

- Develop an off-line software to generate invariant AIC matrices of aircraft and stores, set up corresponding finite element models and spline input, and save the data on a permanent data base.
- Develop an online software that is driven by the GUI (Graphical User Interface) pre-processor to generate the input files of ZAERO and NASTRAN by retrieving the permanent database and can launch NASTRAN and ZAERO jobs.
- Develop an online software that is driven by the GUI post-processor to rapidly search for the critical flutter/LCO configurations and display the results.

*Implementation of GUI system as the underlying software to*

- Graphically display all available stores whose data have been saved in the data base.
- Allow users to graphically select arbitrary store configurations.
- Retrieve store data from the permanent database, assemble NASTRAN and ZAERO input files and launch NASTRAN and ZAERO input files.
- Process the ZAERO results of all aircraft/store configurations to search for the critical flutter/LCO cases and graphically display the results.

*Implementation of parallel computing environment to accelerate computation*

- A parallel virtual machine (PVM) software system can establish a network system linking all computers/CPU's.
- The PVM system allows an optimum distribution of jobs on each CPU to accelerate the computation.
- No user interaction is required since the parallel computing environment is fully automated system.

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## Appendix A.

### Structural Finite Element Data for Classical Flutter Case

```

ID IMTAS BLOCK #0 F-16 FLUTTER FEM
SOL 103
TIME 20
$
CEND
$
TITLE=F-16 1/2 AIRPLANE FINITE ELEMENT MODEL FOR FLUTTER ANALYSIS
SUBTI=ANTI-SYMMETRIC CENTERLINE BOUNDARY CONDITIONS //
LABEL=CONFIG 5 = MA41
DISP=ALL
ECHO=SOR
$ DMIN VERTICAL TAIL STIFFNESS MATRIX
KZGG=VTAIL
$ EIGENVALUE EXTRACTION
METHOD=1
$ SYMMETRIC B.C. / SPC=2 FOR ANTSYMMETRIC
SPC=2
$
$ SET 203022=GRIDS USED IN FLUTTER ANALYSIS.
$ ADD GRIDS 801 THROUGH 814 FOR DYNAMIC RESPONSE.
$ SET 203022=
2, 3, 4, 5, 6,
9, 11, 13, 15, 17,
19, 20, 21, 26, 29,
33, 39, 44, 47, 51,
52, 53, 56, 60, 61,
62, 64, 65, 68, 72,
73, 74, 75, 77, 78,
81, 85, 86, 87, 89,
90, 91, 92, 93, 95,
102, 103, 104, 105, 106,
107, 108, 109, 110, 111,
112, 113, 122, 123, 124,
128, 129, 130, 131, 132,
133, 3004, 3006, 3009   $ AIM-9/16S200 OR 16S200 ON TIP
$ OUTPUT(PLOT)
CSSCALE=1.8
PAPER SIZE=26. BY 20.
$
$ SET 10-ELEMENTS USED IN MODE PLOTS
$
$ FUSELAGE CENTERLINE
SET 10= 1 THRU 26,
$ WING BOX
1001 THRU 1005,
1007,1010 THRU 1013,
1020,1023 THRU 1025,
1031,1034,1036,1043,1045,
1046,1048 THRU 1054,
1056 THRU 1062,
1071 THRU 1074,
1078,1079,1080,
1086 THRU 1090,
1099,1100,1101,
1075,1076,1077,
1081 THRU 1085,
1091 THRU 1097,
1102 THRU 1111,
1116 THRU 1125,
1126,1127,1128,
$ LEADING EDGE FLAP / 1258 ACTUATOR
1131 THRU 1134,
1136,1137,1138,
1140,1141,1142,
1144,1145,1146,
1148 THRU 1151,
1152 THRU 1171,
$ FLAPERON
1181 THRU 1185,
1187 THRU 1189,
1190 THRU 1194,
1196 THRU 1203,
1205 THRU 1207,
1209 THRU 1220,
1231 THRU 1238,
1251 THRU 1258,
1261 THRU 1268,
$ HORIZONTAL TAIL
2001 THRU 2058,
$ VERTICAL TAIL
2401 THRU 2460,
$ 16S200 // STATION 1,9
3003 THRU 3009,
$ AIM-9L // STATION 1,9
3014,3015
$ MAXIMUM DEFORMATION 35.
AXES MX,MY,Z
VIEW 60.0,30.,0.
FIND SCALE ORIGIN 10 SET 10
PLOT MODAL DEF0 0 SET 10 ORIGIN 10
$
BEGIN BULK
ASET 3500 123456
ASET 3501 123456
ASET1 1 163 153 154 155 156 71 286
ASET1 1 267
ASET1 1 284 281
ASET1 1 367 408 368 359 384
ASET1 1 373 364 381 383

```

	ASET1	1	386	391	371	362	387	392	393
	ASET1	1	389	369	360	385	390	370	361
	ASET1	1	410						
	ASET1	3	6	17	5	15	4	13	3
	ASET1	3	11	2	9				
	ASET1	3	19	72	20	60	73	21	61
	ASET1	3	39	47	56	68	81		
	ASET1	3	74	51	62	75	26	52	64
	ASET1	3	77	29	44	53	65	78	33
	ASET1	3	85	86	87	88			
	ASET1	3	90	103	109	89	102	108	
	ASET1	3	95	107	113	93	106	112	124
	ASET1	3	130	133	92	105	111	123	129
	ASET1	3	132	91	104	110	122	128	131
	ASET1	3	233						
	ASET1	3	251	THRU	266				
	ASET1	3	3017	3019	3022				
	ASET1	5	153	154	155	156	71	286	284
	ASET1	5	410						
	ASET1	5	459						
	ASET1	6	437	281	410				
	ASET1	6	458						
	ASET1	3456	3018						
	CBAR	27	27	284	410	1.	1.	0.	
	CBAR	2401	2401	407	367	0.	1.	1.	
	CBAR	2402	2402	367	368	0.	1.	1.	
	CBAR	2403	2403	368	369	0.	1.	1.	
	CBAR	2404	2404	369	370	0.	1.	1.	
	CBAR	2405	2405	370	371	0.	1.	1.	
	CBAR	2406	2406	371	372	0.	1.	1.	
	CBAR	2407	2407	372	373	0.	1.	1.	
	CBAR	2408	2408	357	358	0.	1.	1.	
	CBAR	2409	2409	358	359	0.	1.	1.	
	CBAR	2410	2410	359	360	0.	1.	1.	
	CBAR	2411	2411	360	361	0.	1.	1.	
	CBAR	2412	2412	361	362	0.	1.	1.	
	CBAR	2413	2413	362	363	0.	1.	1.	
	CBAR	2414	2414	363	364	0.	1.	1.	
	CBAR	2415	2415	409	375	0.	1.	1.	
	CBAR	2416	2416	375	376	0.	1.	1.	
	CBAR	2417	2417	376	377	0.	1.	1.	
	CBAR	2418	2418	377	378	0.	1.	1.	
	CBAR	2419	2419	378	379	0.	1.	1.	
	CBAR	2420	2420	379	380	0.	1.	1.	
	CBAR	2421	2421	380	381	0.	1.	1.	
	CBAR	2422	2422	382	383	0.	1.	1.	
	CBAR	2423	2423	384	385	0.	1.	1.	
	CBAR	2424	2424	385	386	0.	1.	1.	
	CBAR	2425	2425	386	387	0.	1.	1.	
	CBAR	2426	2426	387	388	0.	1.	1.	
	CBAR	2427	2427	389	390	0.	1.	1.	
	CBAR	2428	2428	390	391	0.	1.	1.	
	CBAR	2429	2429	391	392	0.	1.	1.	
	CBAR	2430	2430	392	393	0.	1.	1.	
	CBAR	2431	2431	407	357	0.	1.	1.	
	CBAR	2432	2432	357	409	0.	1.	1.	
	CBAR	2433	2433	367	358	0.	1.	1.	
	CBAR	2434	2434	358	375	0.	1.	1.	
	CBAR	2435	2435	375	384	0.	1.	1.	
	CBAR	2436	2436	375	406	0.	1.	1.	
	CBAR	2437	2437	406	408	0.	1.	1.	
	CBAR	2438	2438	368	359	0.	1.	1.	
	CBAR	2439	2439	359	376	0.	1.	1.	
	CBAR	2440	2440	376	384	0.	1.	1.	
	CBAR	2441	2441	369	360	0.	1.	1.	
	CBAR	2442	2442	360	377	0.	1.	1.	
	CBAR	2443	2443	377	395	0.	1.	1.	
	CBAR	2444	2444	370	361	0.	1.	1.	
	CBAR	2445	2445	361	378	0.	1.	1.	
	CBAR	2446	2446	378	386	0.	1.	1.	
	CBAR	2447	2447	371	362	0.	1.	1.	
	CBAR	2448	2448	362	379	0.	1.	1.	
	CBAR	2449	2449	372	363	0.	1.	1.	
	CBAR	2450	2450	363	380	0.	1.	1.	
	CBAR	2451	2451	380	382	0.	1.	1.	
	CBAR	2452	2452	380	388	0.	1.	1.	
	CBAR	2453	2453	373	364	0.	1.	1.	
	CBAR	2454	2454	364	381	0.	1.	1.	
	CBAR	2455	2455	381	383	0.	1.	1.	
	CBAR	2456	2456	384	389	0.	1.	1.	
	CBAR	2457	2457	385	390	0.	1.	1.	
	CBAR	2458	2458	386	391	0.	1.	1.	
	CBAR	2459	2459	387	392	0.	1.	1.	
	CBAR	2460	2460	388	393	0.	1.	1.	
	CBAR	3502	3502	3500	52	1.	1.	0.	
	CBAR	3503	3502	3501	52	1.	1.	0.	
	CBEAM	1	1	163	164	1.	0.	0.	
	CBEAM	2	2	164	153	1.	0.	0.	
	CBEAM	3	3	267	154	1.	0.	0.	
	CBEAM	4	4	154	155	1.	0.	0.	
	CBEAM	5	5	155	156	1.	0.	0.	
	CBEAM	6	6	268	36	1.	0.	0.	
	CBEAM	7	7	36	42	1.	0.	0.	
	CBEAM	8	8	42	50	1.	0.	0.	
	CBEAM	9	9	50	437	1.	0.	0.	
	CBEAM	10	10	437	59	1.	0.	0.	
	CBEAM	11	11	59	431	1.	0.	0.	
	CBEAM	12	12	431	71	1.	0.	0.	
	CBEAM	13	13	71	84	1.	0.	0.	
	CBEAM	14	14	84	298	1.	0.	0.	
	CBEAM	15	15	298	286	1.	0.	0.	
	CBEAM	16	16	286	117	1.	0.	0.	

CBEAM	17	17	117	285	1.	1.	0.		CBEAM	1040	1040	63	245	1.	0.	0.
CBEAM	18	18	285	283	1.	1.	0.		CBEAM	1041	1041	245	76	1.	0.	0.
CBEAM	19	19	283	284	1.	1.	0.		CBEAM	1043	1043	24	51	1.	0.	0.
CBEAM	20	20	284	282	1.	1.	0.		CBEAM	1045	1045	23	51	1.	0.	0.
CBEAM	21	21	282	281	1.	1.	0.		CBEAM	1046	1046	51	62	1.	0.	0.
CBEAM	22	22	281	405	1.	0.	0.		CBEAM	1047	1047	22	62	1.	0.	0.
CBEAM	31	31	36	35	1.	1.	0.		CBEAM	1048	1048	62	244	1.	0.	0.
CBEAM	32	32	42	41	1.	1.	0.		CBEAM	1049	1049	244	75	1.	0.	0.
CBEAM	33	33	50	49	1.	1.	0.		CBEAM	1050	1050	75	88	1.	0.	0.
CBEAM	34	34	59	58	1.	1.	0.		CBEAM	1051	1051	21	61	1.	0.	0.
CBEAM	35	35	71	70	1.	1.	0.		CBEAM	1052	1052	61	243	1.	0.	0.
CBEAM	36	36	84	83	1.	1.	0.		CBEAM	1053	1053	243	74	1.	0.	0.
CBEAM	37	37	117	116	1.	1.	0.	+1053BM	CBEAM	1053	56					
CBEAM	38	38	34	31	1.	1.	0.		CBEAM	1054	1054	74	87	1.	0.	0.
CBEAM	39	39	40	37	1.	1.	0.		CBEAM	1056	1056	20	60	1.	0.	0.
CBEAM	40	40	48	45	1.	1.	0.		CBEAM	1057	1057	60	242	1.	0.	0.
CBEAM	41	41	57	54	1.	1.	0.		CBEAM	1058	1058	242	73	1.	0.	0.
CBEAM	42	42	69	66	1.	1.	0.	+1058BM	CBEAM	1058	56					
CBEAM	43	43	82	94	1.	1.	0.		CBEAM	1059	1059	73	86	1.	0.	0.
CBEAM	44	44	94	118	1.	1.	0.		CBEAM	1060	1060	19	143	1.	0.	0.
CBEAM	45	45	118	121	1.	1.	0.		CBEAM	1061	1061	143	72	1.	0.	0.
CBEAM	46	46	115	79	1.	1.	0.		CBEAM	1062	1062	72	85	1.	0.	0.
CBEAM	47	47	79	120	1.	1.	0.	+1062BM	CBEAM	1071	1071	33	32	0.	1.	0.
CBEAM	48	48	120	114	1.	1.	0.		CBEAM	1072	1072	32	30	0.	1.	0.
CBEAM	49	49	31	37	1.	1.	0.		CBEAM	1073	1073	30	181	0.	1.	0.
+49BM									CBEAM	1074	1074	181	29	0.	1.	0.
CBEAM	50	50	37	45	1.	1.	0.		CBEAM	1075	1075	39	38	0.	1.	0.
CBEAM	51	51	45	54	1.	1.	0.		CBEAM	1076	1076	38	182	0.	1.	0.
CBEAM	52	52	54	66	1.	1.	0.		CBEAM	1077	1077	182	29	0.	1.	0.
CBEAM	53	53	66	121	1.	1.	0.	+53BM	CBEAM	1078	1078	29	27	0.	1.	0.
CBEAM	54	54	121	114	1.	1.	0.		CBEAM	1079	1079	27	187	0.	1.	0.
+54BM	55	55	118	119	1.	1.	0.		CBEAM	1080	1080	187	26	0.	1.	0.
CBEAM	56	56	119	120	1.	1.	0.		CBEAM	1081	1081	47	46	0.	1.	0.
CBEAM	57	57	94	79	1.	1.	0.		CBEAM	1082	1082	46	183	0.	1.	0.
CBEAM	141	141	467	274	1.	1.	0.		CBEAM	1083	1083	44		0.	1.	0.
CBEAM	142	142	274	465	1.	1.	0.		CBEAM	1084	1084	44	188	0.	1.	0.
CBEAM	143	143	465	275	1.	1.	0.		CBEAM	1085	1085	188	26	0.	1.	0.
CBEAM	144	144	275	278	1.	1.	0.		CBEAM	1086	1086	26	25	0.	1.	0.
CBEAM	145	145	278	280	1.	1.	0.		CBEAM	1087	1087	25	192	0.	1.	0.
CBEAM	146	146	280	292	1.	1.	0.		CBEAM	1088	1088	192	24	0.	1.	0.
CBEAM	147	147	292	114	1.	1.	0.	+54BM	CBEAM	1089	1089	24	23	0.	1.	0.
+147BM	148	148	466	273	1.	1.	0.		CBEAM	1090	1090	23	22	0.	1.	0.
CBEAM	149	149	273	464	1.	1.	0.		CBEAM	1091	1091	56	55	0.	1.	0.
CBEAM	150	150	464	276	1.	1.	0.		CBEAM	1092	1092	55	184	0.	1.	0.
CBEAM	151	151	276	279	1.	1.	0.		CBEAM	1093	1093	184	53	0.	1.	0.
CBEAM	152	152	279	290	1.	1.	0.		CBEAM	1094	1094	53	189	0.	1.	0.
CBEAM	153	153	290	293	1.	1.	0.		CBEAM	1095	1095	189	52	0.	1.	0.
CBEAM	154	154	293	79	1.	1.	0.	+154BM	CBEAM	1096	1096	52	193	0.	1.	0.
+154BM	155	155	295	300	1.	1.	0.		CBEAM	1097	1097	193	51	0.	1.	0.
CBEAM	160	160	300	111	1.	1.	0.		CBEAM	1098	1098	51	22	0.	1.	0.
CBEAM	161	161	300	300	1.	1.	0.	+159BM	CBEAM	1099	56					
CBEAM	162	162	300	79	1.	1.	0.		CBEAM	1100	1100	21	20	0.	1.	0.
CBEAM	163	163	79	114	1.	1.	0.		CBEAM	1101	1101	20	19	0.	1.	0.
CBEAM	164	164	283	295	1.	1.	0.		CBEAM	1102	1102	68	67	0.	1.	0.
CBEAM	165	165	295	294	1.	1.	0.		CBEAM	1103	1103	67	185	0.	1.	0.
CBEAM	166	166	293	292	1.	1.	0.		CBEAM	1104	1104	185	65	0.	1.	0.
CBEAM	167	167	282	291	1.	1.	0.		CBEAM	1105	1105	65	190	0.	1.	0.
CBEAM	168	168	290	280	1.	1.	0.		CBEAM	1106	1106	190	64	0.	1.	0.
CBEAM	169	169	271	271	1.	1.	0.	+169BM	CBEAM	1107	1107	64	63	0.	1.	0.
+169BM	170	170	271	278	1.	1.	0.		CBEAM	1108	1108	63	62	0.	1.	0.
+170BM	171	171	281	277	1.	1.	0.		CBEAM	1109	1109	62	61	0.	1.	0.
CBEAM	172	172	276	275	1.	1.	0.		CBEAM	1111	1111	60	19	0.	1.	0.
CBEAM	173	173	464	465	1.	1.	0.		CBEAM	1112	1112	245	244	0.	1.	0.
CBEAM	174	174	466	467	1.	1.	0.		CBEAM	1113	1113	244	243	0.	1.	0.
CBEAM	175	175	271	272	1.	1.	0.	+175BM	CBEAM	1114	1114	243	242	0.	1.	0.
+175BM	176	176	273	241	1.	1.	0.		CBEAM	1115	1115	242	143	0.	1.	0.
CBEAM	177	177	241	299	1.	1.	0.		CBEAM	1116	1116	81	80	0.	1.	0.
CBEAM	178	178	299	272	1.	1.	0.		CBEAM	1117	1117	80	186	0.	1.	0.
CBEAM	179	179	272	274	1.	1.	0.		CBEAM	1118	1118	186	78	0.	1.	0.
CBEAM	180	180	274	233	1.	1.	0.		CBEAM	1119	1119	78	191	0.	1.	0.
CBEAM	181	181	195	296	1.	1.	0.	+181BM	CBEAM	1120	1120	191	77	0.	1.	0.
+181BM	182	182	296	196	1.	1.	0.		CBEAM	1121	1121	77	76	0.	1.	0.
+182BM	183	183	196	39	1.	0.	0.		CBEAM	1122	1122	76	75	0.	1.	0.
CBEAM	1001	1001	39	47	1.	0.	0.		CBEAM	1123	1123	75	74	0.	1.	0.
CBEAM	1002	1002	47	1.	0.	0.		CBEAM	1124	1124	74	73	0.	1.	0.	
CBEAM	1003	1003	47	56	1.	0.	0.		CBEAM	1125	1125	73	72	0.	1.	0.
CBEAM	1004	1004	56	68	1.	0.	0.		CBEAM	1126	1126	88	87	0.	1.	0.
CBEAM	1005	1005	68	81	1.	0.	0.	+BM1134	CBEAM	1127	1127	87	86	0.	1.	0.
CBEAM	1007	1007	32	38	1.	0.	0.		CBEAM	1128	1128	86	85	0.	1.	0.
CBEAM	1009	1009	30	38	1.	0.	0.		CBEAM	1131	1131	7	18	1.	0.	0.
CBEAM	1010	1010	38	46	1.	0.	0.		CBEAM	1132	1132	6	16	1.	0.	0.
CBEAM	1011	1011	46	55	1.	0.	0.		CBEAM	1133	1133	16	17	1.	0.	0.
CBEAM	1012	1012	55	67	1.	0.	0.	+BM1138	CBEAM	1134	1134	17	30	1.	0.	0.
CBEAM	1013	1013	67	80	1.	0.	0.		CBEAM	1139	1139	175	179	1.	0.	0.
CBEAM	1014	1014	181	182	1.	0.	0.		CBEAM	1140	1140	4	12	1.	0.	0.
CBEAM	1015	1015	182	183	1.	0.	0.		CBEAM	1141	1141	12	13	1.	0.	0.
CBEAM	1016	1016	183	184	1.	0.	0.		CBEAM	1142	1142	13	25	1.	0.	0.
CBEAM	1017	1017	184	185	1.	0.	0.	+BM1142	CBEAM	1143	1143	174	178	1.	0.	0.
CBEAM	1020	1020	29	44	1.	0.	0.		CBEAM	1144	1144	3	10	1.	0.	0.
CBEAM	1022	1022	27	44	1.	0.	0.		CBEAM	1145	1145	10	11	1.	0.	0.
CBEAM	1023	1023	44	53	1.	0.	0.		CBEAM	1146	1146	11	23	1.	0.	

CBEAM	1159	1159	173	3	1.	0.	0.		+BM1181	456	CBEAM	2017	456	CBEAM	2018	2018	510	260	1.	1.	1.	0.	
CBEAM	1160	1160	2	173	1.	0.	0.		+BM1181	456	CBEAM	2019	2019	CBEAM	2020	2020	521	265	1.	1.	1.	0.	+BM2020
CBEAM	1161	1161	1	2	1.	0.	0.		+BM1181	456	CBEAM	2021	2021	CBEAM	2022	2022	511	261	1.	1.	1.	0.	+BM2021
CBEAM	1162	1162	16	18	1.	0.	0.		+BM1181	456	CBEAM	2023	2023	CBEAM	2024	2024	521	261	1.	1.	1.	0.	+BM2022
CBEAM	1163	1163	180	16	1.	0.	0.		+BM1181	456	CBEAM	2024	2024	CBEAM	2025	2025	521	266	1.	1.	1.	0.	+BM2023
CBEAM	1164	1164	14	180	1.	0.	0.		+BM1181	456	CBEAM	2025	2025	CBEAM	2026	2026	502	253	1.	1.	1.	0.	
CBEAM	1165	1165	179	14	1.	0.	0.		+BM1181	456	CBEAM	2026	2026	CBEAM	2027	2027	503	254	1.	1.	1.	0.	
CBEAM	1166	1166	12	179	1.	0.	0.		+BM1181	456	CBEAM	2027	2027	CBEAM	2028	2028	504	255	1.	1.	1.	0.	
CBEAM	1167	1167	178	12	1.	0.	0.		+BM1181	456	CBEAM	2028	2028	CBEAM	2029	2029	505	255	1.	1.	1.	0.	
CBEAM	1168	1168	10	178	1.	0.	0.		+BM1181	456	CBEAM	2029	2029	CBEAM	2030	2030	501	251	1.	1.	1.	0.	+BM2031
CBEAM	1169	1169	177	10	1.	0.	0.		+BM1181	456	CBEAM	2030	2030	CBEAM	2031	2031	501	251	1.	1.	1.	0.	
CBEAM	1170	1170	194	177	1.	0.	0.		+BM1181	456	CBEAM	2031	2031	CBEAM	2032	2032	501	252	1.	1.	1.	0.	
CBEAM	1171	1171	8	194	1.	0.	0.		+BM1181	456	CBEAM	2032	2032	CBEAM	2033	2033	502	252	1.	1.	1.	0.	
CBEAM	1181	1181	81	95	1.	0.	0.		+BM1181	456	CBEAM	2033	2033	CBEAM	2034	2034	502	253	1.	1.	1.	0.	
									+BM1181	456	CBEAM	2034	2034	CBEAM	2035	2035	503	253	1.	1.	1.	0.	
CBEAM	1182	1182	95	142	1.	0.	0.		+BM1181	456	CBEAM	2035	2035	CBEAM	2036	2036	503	254	1.	1.	1.	0.	
CBEAM	1183	1183	142	101	1.	0.	0.		+BM1181	456	CBEAM	2036	2036	CBEAM	2037	2037	504	254	1.	1.	1.	0.	
CBEAM	1184	1184	101	107	1.	0.	0.		+BM1181	456	CBEAM	2037	2037	CBEAM	2038	2038	504	255	1.	1.	1.	0.	
CBEAM	1185	1185	107	113	1.	0.	0.		+BM1181	456	CBEAM	2038	2038	CBEAM	2039	2039	505	255	1.	1.	1.	0.	
CBEAM	1186	1186	93	141	1.	0.	0.		+BM1181	456	CBEAM	2039	2039	CBEAM	2040	2040	505	256	1.	1.	1.	0.	
CBEAM	1187	1187	141	100	1.	0.	0.		+BM1181	456	CBEAM	2040	2040	CBEAM	2041	2041	512	260	1.	1.	1.	0.	
CBEAM	1188	1188	100	106	1.	0.	0.		+BM1181	456	CBEAM	2041	2041	CBEAM	2042	2042	512	257	1.	1.	1.	0.	
CBEAM	1189	1189	106	112	1.	0.	0.		+BM1181	456	CBEAM	2042	2042	CBEAM	2043	2043	513	257	1.	1.	1.	0.	
CBEAM	1190	1190	186	124	1.	0.	0.		+BM1181	456	CBEAM	2043	2043	CBEAM	2044	2044	513	258	1.	1.	1.	0.	
									+BM1181	456	CBEAM	2044	2044	CBEAM	2045	2045	514	259	1.	1.	1.	0.	
CBEAM	1191	1191	124	140	1.	0.	0.		+BM1181	456	CBEAM	2045	2045	CBEAM	2046	2046	514	259	1.	1.	1.	0.	
CBEAM	1192	1192	140	127	1.	0.	0.		+BM1181	456	CBEAM	2046	2046	CBEAM	2047	2047	515	260	1.	1.	1.	0.	
CBEAM	1193	1193	127	130	1.	0.	0.		+BM1181	456	CBEAM	2047	2047	CBEAM	2048	2048	515	260	1.	1.	1.	0.	
CBEAM	1194	1194	130	133	1.	0.	0.		+BM1181	456	CBEAM	2048	2048	CBEAM	2049	2049	516	261	1.	1.	1.	0.	
CBEAM	1195	1195	92	139	1.	0.	0.		+BM1181	456	CBEAM	2049	2049	CBEAM	2050	2050	516	261	1.	1.	1.	0.	
CBEAM	1196	1196	139	99	1.	0.	0.		+BM1181	456	CBEAM	2050	2050	CBEAM	2051	2051	523	262	1.	1.	1.	0.	
CBEAM	1197	1197	99	105	1.	0.	0.		+BM1181	456	CBEAM	2051	2051	CBEAM	2052	2052	523	263	1.	1.	1.	0.	
CBEAM	1198	1198	105	111	1.	0.	0.		+BM1181	456	CBEAM	2052	2052	CBEAM	2053	2053	523	263	1.	1.	1.	0.	
CBEAM	1199	1199	191	123	1.	0.	0.		+BM1181	456	CBEAM	2053	2053	CBEAM	2054	2054	524	263	1.	1.	1.	0.	
									+BM1181	456	CBEAM	2054	2054	CBEAM	2055	2055	524	264	1.	1.	1.	0.	
CBEAM	1200	1200	123	138	1.	0.	0.		+BM1181	456	CBEAM	2055	2055	CBEAM	2056	2056	525	265	1.	1.	1.	0.	
CBEAM	1201	1201	138	126	1.	0.	0.		+BM1181	456	CBEAM	2056	2056	CBEAM	2057	2057	525	265	1.	1.	1.	0.	
CBEAM	1202	1202	126	129	1.	0.	0.		+BM1181	456	CBEAM	2057	2057	CBEAM	2058	2058	526	266	1.	1.	1.	0.	
CBEAM	1203	1203	129	132	1.	0.	0.		+BM1181	456	CBEAM	2058	2058	CBEAM	2059	2059	526	266	1.	1.	1.	0.	
CBEAM	1204	1204	91	137	1.	0.	0.		+BM1181	456	CBEAM	2059	2059	CBEAM	2060	2060	526	266	1.	1.	1.	0.	
CBEAM	1205	1205	137	98	1.	0.	0.		+BM1181	456	CBEAM	2060	2060	CBEAM	2061	2061	527	267	1.	1.	1.	0.	
CBEAM	1206	1206	98	104	1.	0.	0.		+BM1181	456	CBEAM	2061	2061	CBEAM	2062	2062	527	267	1.	1.	1.	0.	
CBEAM	1207	1207	104	110	1.	0.	0.		+BM1181	456	CBEAM	2062	2062	CBEAM	2063	2063	527	267	1.	1.	1.	0.	
CBEAM	1208	1208	122	136	1.	0.	0.		+BM1181	456	CBEAM	2063	2063	CBEAM	2064	2064	528	268	1.	1.	1.	0.	
CBEAM	1209	1209	136	125	1.	0.	0.		+BM1181	456	CBEAM	2064	2064	CBEAM	2065	2065	528	268	1.	1.	1.	0.	
CBEAM	1210	1210	125	128	1.	0.	0.		+BM1181	456	CBEAM	2065	2065	CBEAM	2066	2066	529	268	1.	1.	1.	0.	
CBEAM	1211	1211	128	131	1.	0.	0.		+BM1181	456	CBEAM	2066	2066	CBEAM	2067	2067	529	269	1.	1.	1.	0.	
CBEAM	1212	1212	76	90	1.	0.	0.		+BM1181	456	CBEAM	2067	2067	CBEAM	2068	2068	530	269	1.	1.	1.	0.	
									+BM1212	456	CBEAM	2068	2068	CBEAM	2069	2069	530	269	1.	1.	1.	0.	
CBEAM	1213	1213	90	135	1.	0.	0.		+BM1212	456	CBEAM	2069	2069	CBEAM	2070	2070	531	270	1.	1.	1.	0.	
CBEAM	1214	1214	135	97	1.	0.	0.		+BM1212	456	CBEAM	2070	2070	CBEAM	2071	2071	531	270	1.	1.	1.	0.	
CBEAM	1215	1215	97	103	1.	0.	0.		+BM1212	456	CBEAM	2071	2071	CBEAM	2072	2072	532	270	1.	1.	1.	0.	
CBEAM	1216	1216	103	109	1.	0.	0.		+BM1212	456	CBEAM	2072	2072	CBEAM	2073	2073	532	270	1.	1.	1.	0.	
CBEAM	1217	1217	89	134	1.	0.	0.		+BM1212	456	CBEAM	2073	2073	CBEAM	2074	2074	533	271	1.	1.	1.	0.	
CBEAM	1218	1218	134	96	1.	0.	0.		+BM1212	456	CBEAM	2074	2074	CBEAM	2075	2075	533	271	1.	1.	1.	0.	
CBEAM	1219	1219	96	102	1.	0.	0.		+BM1212	456	CBEAM	2075	2075	CBEAM	2076	2076	534	271	1.	1.	1.	0.	
CBEAM	1220	1220	102	108	1.	0.	0.		+BM1212	456	CBEAM	2076	2076	CBEAM	2077	2077	534	271	1.	1.	1.	0.	
CBEAM	1231	1231	141	142	1.	0.	0.		+BM1212	456	CBEAM	2077	2077	CBEAM	2078	2078	534	271	1.	1.	1.	0.	
CBEAM	1232	1232	140	141	1.	0.	0.		+BM1212	456	CBEAM	2078	2078	CBEAM	2079	2079	535	272	1.	1.	1.	0.	
CBEAM	1233	1233	139	140	1.	0.	0.		+BM1212	456	CBEAM	2079	2079	CBEAM	2080	2080	535	272	1.	1.	1.	0.	
CBEAM	1234	1234	138	139	1.	0.	0.		+BM1212	456	CBEAM	2080	2080	CBEAM	2081	2081	535	272	1.	1.	1.	0.	
CBEAM	1235	1235	137	138	1.	0.	0.		+BM1212	456	CBEAM	2081	2081	CBEAM	2082	2082	536	272	1.	1.	1.	0.	
CBEAM																							

+316	60.677				+396	1799.25			
CONN1	317	44	0		CONN1	397	71	0	+397
+317	80.964				+397	1412.77			+398
CONN1	318	53	0		CONN1	398	286	0	+399
+318	74.861				+398	693.77			+399
CONN1	319	65	0		+399	335.19			+400
+319	56.266				CONN1	400	281	0	
CONN1	320	78	0		+400	708.33			
+320	28.341				+321	CONN1	401	163	
CONN1	321	33	0		CONN1	402	153	0	+411
+321	37.854				CONN1	403	154	0	+411A
CONN1	322	39	0		CONN1	404	155	0	+412
+322	99.621				CONN1	405	156	0	+412A
CONN1	323	47	0		CONN1	406	42	0	
+323	105.244				CONN1	407	71	0	2036.16
CONN1	324	56	0		CONN1	408	286	0	2468.11
+324	95.811				CONN1	409	284	0	
CONN1	325	68	0		CONN1	410	281	0	311.29
+325	83.620				CONN1	411	153	0	
CONN1	326	81	0		+411	119126.			
+326	33.148				CONN1	412	154	0	
CONN1	341	85	0		+412				
+341	.6				+412A	498740.			
CONN1	342	86	0		+413				
+342	1.6				+413A	233410.			
CONN1	343	87	0		CONN1	414	156	0	
+343	1.8				+414				
CONN1	344	88	0		+414A	865169.			
+344	1.				CONN1	415	42	0	
CONN1	345	6	0		+415				
+345	12.03				+415A	1051483.			
CONN1	346	17	0		CONN1	416	71	0	
+346	57.78				+416				
CONN1	347	5	0		+416A				
+347	10.08				+417				
CONN1	348	15	0		+417A	1042917.			
+348	42.72				CONN1	417	286	0	
CONN1	349	4	0		+418	556929.			
+349	6.92				CONN1	418	284	0	
CONN1	350	13	0		+418A	756147.			
+350	27.67				CONN1	430	195	0	
CONN1	351	3	0		+430				
+351	5.17				CONN1	431	296	0	
CONN1	352	11	0		+431				
+352	27.65				3803477.				
CONN1	353	2	0		+432				
+353	4.08				CONN1	432	296	0	
CONN1	354	9	0		+432	2073.44			
+354	3.71				CONN1	433	42	0	
CONN1	355	95	0		CONN1	434	437	0	
+355	9.133				+434				
CONN1	356	107	0		+434A	19.7E6			
+356	6.765				CONN1	435	281	0	
CONN1	357	113	0		+435				
+357	.022				+435A	945062.			
CONN1	358	93	0		CONN1	436	410	0	
+358	10.32				+436				
CONN1	359	106	0		+436A				
+359	10.12				CONN1	437	410	0	
CONN1	360	112	0		+437				
+360	.149				+437A	3604069.			
CONN1	361	124	0		CONN1	438	410	0	
+361	5.816				+438				
CONN1	362	130	0		CONN1	446	251	0	
+362	7.986				+446	4.65			
CONN1	363	133	0		CONN1	447	252	0	
+363	.998				+447	5.123			
CONN1	364	92	0		CONN1	448	253	0	
+364	4.56				+448	4.812			
CONN1	365	105	0		CONN1	449	254	0	
+365	6.797				+449	3.069			
CONN1	366	111	0		CONN1	450	255	0	
+366	.952				+450	1.73			
CONN1	367	123	0		CONN1	451	256	0	
+367	3.296				+451	2.547			
CONN1	368	129	0		CONN1	452	233	0	
+368	4.727				+452	176.302			
CONN1	369	132	0		CONN1	453	257	0	
+369	.647				+453	31.053			
CONN1	370	91	0		CONN1	454	258	0	
+370	2.069				+454	17.674			
CONN1	371	104	0		CONN1	455	259	0	
+371	3.014				+455	11.742			
CONN1	372	110	0		CONN1	456	260	0	
+372	.477				+456	7.391			
CONN1	373	122	0		CONN1	457	261	0	
+373	1.784				+457	2.877			
CONN1	374	128	0		CONN1	458	262	0	
+374	2.632				+458	3.675			
CONN1	375	131	0		CONN1	459	263	0	
+375	.435				+459	3.064			
CONN1	376	90	0		CONN1	460	264	0	
+376	1.644				+460	2.838			
CONN1	377	103	0		CONN1	461	265	0	
+377	2.354				+461	2.73			
CONN1	378	109	0		CONN1	462	266	0	
+378	.272				+462	.976			
CONN1	379	89	0		CONN1	501	407	0	
+379	.651				CONN1	502	409	0	
CONN1	380	102	0		CONN1	503	367	0	
+380	1.075				CONN1	504	408	0	
CONN1	381	108	0		CONN1	505	368	0	
+381	.284				CONN1	506	359	0	
CONN1	391	163	0		CONN1	507	384	0	
+391	314.21				CONN1	508	389	0	
CONN1	392	153	0		CONN1	509	369	0	
+392	463.77				CONN1	510	360	0	
CONN1	393	154	0		CONN1	511	385	0	
+393	870.68				CONN1	512	390	0	
CONN1	394	155	0		CONN1	513	370	0	
+394	1299.38				CONN1	514	361	0	
CONN1	395	156	0		CONN1	515	386	0	
+395	1545.78				CONN1	516	391	0	
CONN1	396	42	0		CONN1	517	371	0	
+396					1.12				

CONN1	518	362	0	2.9		CQUAD4	672	672	1105	1111	1132	1129	
CONN1	519	387	0	2.4		CQUAD4	673	673	1138	1126	1098	1137	
CONN1	520	392	0	.59		CQUAD4	674	674	1126	1129	1104	1098	
CONN1	521	393	0	.37		CQUAD4	675	675	1129	1132	1110	1104	
CONN1	522	373	0	1.94		CQUAD4	676	676	1137	1098	1125	1136	
CONN1	523	364	0	.48		CQUAD4	677	677	1098	1104	1128	1125	
CONN1	524	381	0	2.66		CQUAD4	678	678	1104	1110	1131	1128	
CONN1	525	383	0	.89	+526	CQUAD4	679	679	1136	1125	1097	1135	
CONN1	526	281				CQUAD4	680	680	1125	1128	1103	1097	
CONN1	3042	3018	56.69	822933.		CQUAD4	681	681	1128	1131	1109	1103	
+3042	50.69			38266.		CQUAD4	682	682	1135	1097	1096	1134	
+3042A	0.				35266.	CQUAD4	683	683	1097	1103	1102	1096	
CONN1	3043	3019				CQUAD4	684	684	1103	1109	1108	1102	
+3043	-4.70					CQUAD4	1601	601	2033	2039	2038	2032	
CONN1	3044	3022	35.01			CQUAD4	1602	602	2039	2047	2046	2038	
+3044	50.01					CQUAD4	1603	603	2047	2056	2055	2046	
CONN1	3047	3017				CQUAD4	1604	604	2056	2068	2067	2055	
+3047	.010					CQUAD4	1605	605	2068	2081	2080	2067	
CONN2	3501	3500	502.	0.	-2.	CQUAD4	1608	608	2038	2046	2183		
+000001698549.2			8160.8		649152.0	CQUAD4	1609	609	2046	2055	2184	2183	
CONN2	3504	3501		138.	0.	CQUAD4	1610	610	2055	2067	2185	2184	
+00000366538.01					62828.60	CQUAD4	1611	611	2067	2080	2186	2185	
CONROD	183	272	233	2	16.0875	CQUAD4	1613	613	2182	2183	2044	2029	
CONROD	2201	233	1233	2	.0001	CQUAD4	1614	614	2183	2184	2053	2044	
CONROD	2202	233	233	2	.0001	CQUAD4	1615	615	2184	2185	2065	2053	
CONROD	2203	251	1251	2	.0001	CQUAD4	1616	616	2185	2186	2078	2065	
CONROD	2204	251	2251	2	.0001	CQUAD4	1618	618	2027	2044	2188	2187	
CONROD	2205	252	1252	2	.0001	CQUAD4	1619	619	2044	2053	2189		
CONROD	2206	252	2252	2	.0001	CQUAD4	1620	620	2053	2065	2190	2189	
CONROD	2207	253	1253	2	.0001	CQUAD4	1621	621	2065	2078	2191	2190	
CONROD	2208	253	2253	2	.0001	CQUAD4	1623	623	2188	2189	2052	2026	
CONROD	2209	254	1254	2	.0001	CQUAD4	1624	624	2189	2190	2064	2052	
CONROD	2210	254	2254	2	.0001	CQUAD4	1625	625	2190	2191	2077	2064	
CONROD	2211	255	1255	2	.0001	CQUAD4	1627	627	2025	2052	2193	2192	
CONROD	2212	255	2255	2	.0001	CQUAD4	1628	628	2052	2064	2063	2193	
CONROD	2213	256	1256	2	.0001	CQUAD4	1632	632	2192	2193	2051	2024	
CONROD	2214	256	2256	2	.0001	CQUAD4	1633	633	2193	2063	2062	2051	
CONROD	2215	257	1257	2	.0001	CQUAD4	1634	634	2063	2245	2244	2062	
CONROD	2216	257	2257	2	.0001	CQUAD4	1635	635	2245	2076	2075	2244	
CONROD	2217	258	1258	2	.0001	CQUAD4	1639	639	2062	2061	2021	2022	
CONROD	2218	258	2258	2	.0001	CQUAD4	1640	640	2062	2244	2243	2061	
CONROD	2219	259	1259	2	.0001	CQUAD4	1641	641	2244	2075	2074	2243	
CONROD	2220	259	2259	2	.0001	CQUAD4	1643	643	2021	2061	2060	2020	
CONROD	2221	260	1260	2	.0001	CQUAD4	1644	644	2061	2243	2242	2060	
CONROD	2222	260	2260	2	.0001	CQUAD4	1645	645	2243	2074	2073	2242	
CONROD	2223	261	1261	2	.0001	CQUAD4	1646	646	2060	2242	2143	2019	
CONROD	2224	261	2261	2	.0001	CQUAD4	1649	649	2242	2073	2072	2143	
CONROD	2225	262	1262	2	.0001	CQUAD4	1661	661	2142	2101	2100	2141	
CONROD	2226	262	2262	2	.0001	CQUAD4	1662	662	2101	2107	2106	2100	
CONROD	2227	263	1263	2	.0001	CQUAD4	1663	663	2107	2113	2112	2106	
CONROD	2228	263	2263	2	.0001	CQUAD4	1664	664	2110	2127	2140		
CONROD	2229	264	1264	2	.0001	CQUAD4	1665	665	2100	2106	2130	2127	
CONROD	2230	264	2264	2	.0001	CQUAD4	1666	666	2106	2112	2133	2130	
CONROD	2231	265	1265	2	.0001	CQUAD4	1667	667	2140	2127	2099	2139	
CONROD	2232	265	2265	2	.0001	CQUAD4	1668	668	2127	2130	2105	2099	
CONROD	2233	266	1266	2	.0001	CQUAD4	1669	669	2130	2133	2111	2105	
CONROD	2234	266	2266	2	.0001	CQUAD4	1670	670	2139	2126	2138		
CONROD	3033	3018	3020	2	20-	CQUAD4	1671	671	2099	2105	2129	2126	
CONROD	3034	3020	3022	2	20-	CQUAD4	1672	672	2105	2111	2132	2129	
CORD1R	5	701	702	703		CQUAD4	1673	673	2138	2126	2098	2137	
CORD2C *3	0		-63.574		-294.247	*CORD3A	1674	674	2126	2129	2104	2098	
*CORD3A 0.		-143.398002		-351.530085	0.	+CORD3B	1675	675	2129	2132	2110		
+CORD3B -63.574	-294.247	100.				CQUAD4	1676	676	2137	2098	2125	2136	
CORD2R	1	0	-62.153	-293.2270.	-62.153	-293.227100.	*CORD1	1677	677	2098	2104	2128	2125
*CORD1	19.092002		-234.923915	0.		CQUAD4	1678	678	2104	2110	2131	2128	
CORD2R	7	0	-41.5	-378.02	0.	-41.5	-378.02	100.	*CORD7	1679	679	2136	2125
*CORD7	57.2946361		-362.5403399	0.		CQUAD4	1680	680	2128	2103	2097		
CQUAD4	601	1033	1039	1038	1032	CQUAD4	1681	681	2128	2131	2109	2103	
CQUAD4	602	1039	1047	1046	1038	CQUAD4	1682	682	2135	2097	2096	2134	
CQUAD4	603	1047	1056	1055	1046	CQUAD4	1683	683	2097	2103	2102	2096	
CQUAD4	604	1056	1068	1067	1055	CQUAD4	1684	684	2103	2109	2108	2102	
CQUAD4	605	1068	1081	1080	1067	CQUAD8	701	701	1257	1252	1251	1233	
CQUAD4	607	1078	1182	1181	1030	+701	1506	1512			1507	1501	
CQUAD4	608	1038	1046	1183	1182	CQUAD8	702	702	1252	1257	1253	1507	
CQUAD4	609	1046	1055	1184	1183	+702	1508	1502			99.5		
CQUAD4	610	1055	1067	1185	1184	CQUAD8	703	703	1253	1258	1254	+703	
CQUAD4	611	1067	1080	1186	1185	+703	1509	1503			99.5		
CQUAD4	613	1182	1183	1044	1029	CQUAD8	704	704	1254	1259	1260	1509	
CQUAD4	614	1183	1184	1053	1044	+704	1510	1504			99.5		
CQUAD4	615	1184	1185	1065	1053	CQUAD8	705	705	1255	1260	1261	1510	
CQUAD4	616	1185	1186	1078	1065	+705	1511	1505			99.5		
CQUAD4	618	1027	1044	1188	1187	CQUAD8	707	707	1257	1262	1263	1518	
CQUAD4	619	1044	1053	1189	1188	+707	1519	1513			99.5		
CQUAD4	620	1053	1065	1190	1189	CQUAD8	708	708	1258	1263	1264	+708	
CQUAD4	621	1065	1078	1191	1190	+708	1520	1514			99.5		
CQUAD4	623	1188	1189	1052	1026	CQUAD8	709	709	1259	1264	1265	1520	
CQUAD4	624	1189	1190	1064	1052	+709	1521	1515			99.5		
CQUAD4	625	1190	1191	1077	1064	CQUAD8	710	710	1260	1265	1266	1521	
CQUAD4	627	1025	1052	1193	1192	+710	1522	1516			99.5		
CQUAD4	628	1052	1064	1063	1193	CQUAD8	701	701	2257	2252	2251	2233	
CQUAD4	632	1192	1193	1051	1024	+707	1506	2506			99.5		
CQUAD4	633	1193	1063	1062	1051	CQUAD8	1702	702	2252	2257	2253	+170	
CQUAD4	634	1063	1245	1244	1062	+707	1507	2508			99.5		
CQUAD4	635	1245	1076	1075	1244	CQUAD8	1703	703	2253	2258	2254	2508	
CQUAD4	639	1062	1061	1021	1022	+707	2509	2503			99.5		
CQUAD4	640	1062	1244	1243	1061	CQUAD8	1704	704	2254	2259	2260	2509	
CQUAD4	641	1244	1075	1074	1243	+707	2510	2504			99.5		
CQUAD4	643	1021	1061	1060	1020	CQUAD8	1705	705	2255	2260	2261	2510	
CQUAD4	644	1061	1243	1242	1060	+705	2511	2505			99.5		
CQUAD4	645	1243	1074	1073	1242	CQUAD8	1707	707	2257	2262	2263	2518	
CQUAD4	648	1060	1242	1143	1019	+707	2519	2513			99.5		
CQUAD4	649	1242	1073	1072	1143	CQUAD8	1708	708	2258	2263	2264	2519	
CQUAD4	661	1142	1101	1100	1141	+708	2520	2514			99.5		
CQUAD4	662	1101	1107	1106	1106	CQUAD8	1709	709	2259	2264	2265	2520	
CQUAD4	663	1107	1113	1112	1106	+709	2521	2515			99.5		
CQUAD4	664	1141	1100	1127	1140	CQUAD8	1710	710	2260	2265	2266	2521	
CQUAD4	665	1100	1106	1130	1127	+710	2522	2516			99.5		
CQUAD4	666	1106	1112	1133	1130	CSEHAR	71	71	1034	1040	1037	1031	
CQUAD4	667	1140	1127	1099	1139	CSEHAR	72	72					

C\$HEAR	77	71	2034	2040	2037	2031		*9037	357	1	0.156429E+04	*9038	358	1	-1.26722E+05	*9039
C\$HEAR	78	72	2040	2048	2045	2037		*9039	359	1	-24.9630E+02	*9040				
C\$HEAR	79	73	2048	2057	2054	2045		*9040	360	1	0.252357E+03	*9041				
C\$HEAR	80	74	2057	2069	2066	2054		*9041	361	1	0.220342E+02	*9042				
C\$HEAR	81	75	2069	2082	2121	2066		*9042	362	1	-34.8368E+01	*9043				
C\$HEAR	82	76	2094	2079	2114	2121		*9043	363	1	0.213553E-02	*9044				
C\$HEAR	201	201	1465	1464	1466	1467		*9044	364	1	0.287588E+00	*9045				
C\$HEAR	202	202	1275	1276	1464	1465		*9045	367	1	0.573159E+05					
C\$HEAR	203	203	1280	1290	1276	1275		D\$HIG	*VTAIL	368	1				*9046	
C\$HEAR	204	204	1114	1079	1293	1292		*9046	357	1	0.150006E+03	*9047				
C\$HEAR	205	201	2465	2464	2466	2467		*9047	358	1	-34.9447E+01	*9048				
C\$HEAR	206	202	2275	2276	2464	2465		*9048	359	1	-18.4666E+05	*9049				
C\$HEAR	207	203	2280	2290	2276	2275		*9049	360	1	-59.7411E+03	*9050				
C\$HEAR	208	204	2114	2079	2293	2292		*9050	361	1	0.413201E+03	*9051				
C\$HEAR	642	642	1075	1088	1087	1074		*9051	362	1	-48.9800E+02	*9052				
C\$HEAR	646	646	1074	1087	1086	1073		*9052	363	1	-27.1009E+00	*9053				
C\$HEAR	650	650	1073	1086	1085	1072		*9053	364	1	-20.2785E+01	*9054				
C\$HEAR	651	651	1007	1018	1016	1006		*9054	367	1	-50.2776E+04	*9055				
C\$HEAR	652	652	1006	1016	1180	1176		*9055	368	1	0.246725E+05					
C\$HEAR	653	653	1176	1180	1014	1005		D\$HIG	*VTAIL	369	1				*9056	
C\$HEAR	654	654	1005	1014	1179	1175		*9056	357	1	0.292477E+03	*9057				
C\$HEAR	655	655	1175	1179	1012	1004		*9057	358	1	0.106657E+04	*9058				
C\$HEAR	656	656	1004	1012	1178	1174		*9058	359	1	-37.2974E+04	*9059				
C\$HEAR	657	657	1174	1178	1010	1003		*9059	360	1	-16.3066E+05	*9060				
C\$HEAR	658	658	1003	1010	1177	1173		*9060	361	1	-7.2023E+03	*9061				
C\$HEAR	659	659	1173	1177	1194	1002		*9061	362	1	0.400484E+03	*9062				
C\$HEAR	660	660	1002	1194	1008	1001		*9062	363	1	0.516836E+00	*9063				
C\$HEAR	1642	642	2075	2088	2087	2074		*9063	364	1	-14.1972E+02	*9064				
C\$HEAR	1646	646	2074	2087	2086	2073		*9064	367	1	0.245134E+03	*9065				
C\$HEAR	1650	650	2073	2086	2085	2072		*9065	368	1	-6.250478E+04	*9066				
C\$HEAR	1651	651	2007	2018	2016	2006		*9066	369	1	0.208907E+05					
C\$HEAR	1652	652	2006	2180	2176			D\$HIG	*VTAIL	370	1				*9067	
C\$HEAR	1653	653	2176	2180	2014	2005		*9067	357	1	0.109520E+02	*9068				
C\$HEAR	1654	654	2005	2014	2179	2175		*9068	358	1	-4.219165E+02	*9069				
C\$HEAR	1655	655	2175	2179	2012	2004		*9069	359	1	0.371999E+03	*9070				
C\$HEAR	1656	656	2004	2012	2176	2174		*9070	360	1	-2.383433E+04	*9071				
C\$HEAR	1657	657	2174	2178	2010	2003		*9071	361	1	-14.7446E+05	*9072				
C\$HEAR	1658	658	2003	2010	2177	2173		*9072	362	1	0.690143E+03	*9073				
C\$HEAR	1659	659	2173	2177	2194	2002		*9073	363	1	0.223676E+03	*9074				
C\$HEAR	1660	660	2002	2194	2008	2001		*9074	364	1	-0.244021E+02	*9075				
CTRIA3	606	606	1032	1038	1030			*9075	367	1	-5.74195E+02	*9076				
CTRIA3	612	612	1181	1182	1029			*9076	368	1	0.416297E+03	*9077				
CTRIA3	617	617	1029	1044	1027			*9077	369	1	-4.16404E+04	*9078				
CTRIA3	622	622	1187	1188	1026			*9078	370	1	0.182956E+05					
CTRIA3	626	626	1026	1052				D\$HIG	*VTAIL	371	1				*9079	
CTRIA3	629	629	1064	1245				*9079	357	1	-3.19898E+00	*9080				
CTRIA3	630	630	1064	1077				*9080	358	1	-10.5520E+02	*9081				
CTRIA3	631	631	1077	1076				*9081	359	1	0.537074E+02	*9082				
CTRIA3	636	636	1051	1023				*9082	360	1	0.115045E+03	*9083				
CTRIA3	637	637	1051	1022				*9083	361	1	-4.55381E+03	*9084				
CTRIA3	638	638	1062	1022				*9084	362	1	-1.31301E+05	*9085				
CTRIA3	647	647	1019	1020				*9085	363	1	0.208463E+04	*9086				
CTRIA3	1606	606	2032	2038	2030			*9086	364	1	-2.71085E+03	*9087				
CTRIA3	1612	612	2181	2182	2029			*9087	367	1	0.123231E+02	*9088				
CTRIA3	1617	617	2029	2044	2027			*9088	368	1	-2.34544E+03	*9089				
CTRIA3	1622	622	2187	2188	2026			*9089	369	1	0.874696E+03	*9090				
CTRIA3	1626	626	2026	2052	2025			*9090	370	1	-7.44486E+04	*9091				
CTRIA3	1629	629	2064	2245	2063			*9091	371	1	0.300624E+05					
CTRIA3	1630	630	2064	2077	2245			D\$HIG	*VTAIL	372	1				*9092	
CTRIA3	1631	631	2077	2076	2245			*9092	357	1	0.463602E+00	*9093				
CTRIA3	1636	636	2051	2053	2024			*9093	358	1	-6.77371E+01	*9094				
CTRIA3	1637	637	2051	2022	2023			*9094	359	1	-1.34093E+02	*9095				
CTRIA3	1638	638	2062	2022	2051			*9095	360	1	0.577641E+02	*9096				
CTRIA3	1647	647	2019	2020	2060			*9096	361	1	-9.15742E+03	*9097				
CTRIA6	706	706	1262	1257	1233	1518	1512	1517	+706							
+706	99.5							*9097	357	1	-31.6023E+03	*9098				
+1706	99.5							*9098	358	1	-1.877265E+04	*9099				
D\$HIG	*VTAIL	0	6	1	0			*9099	360	1	-1.927985E+05	*9100				
D\$HIG	*VTAIL	357	1					*9100	372	1	0.276338E+05	*9101				
*9001	357	1						*9101	368	1	-7.94538E+01	*9102				
D\$HIG	*VTAIL	358	1					*9102	369	1	-31.6023E+02	*9103				
*9002	357	1						*9103	370	1	-1.877265E+04	*9104				
*9003	358	1						*9104	371	1	-1.927985E+05	*9105				
*9004	357	1						D\$HIG	*VTAIL	373	1				*9106	
*9005	358	1						*9106	357	1	0.484957E-02	*9107				
*9006	358	1						*9107	358	1	0.440965E+00	*9108				
*9006	359	1						*9108	359	1	-6.91597E+00	*9109				
*9007	357	1						*9109	360	1	0.363362E+02	*9111				
*9008	358	1						*9110	361	1	0.411035E+01	*9112				
*9009	359	1						*9111	362	1	-1.633478E+04	*9113				
*9010	360	1						*9112	363	1	-2.58823E+04	*9114				
*9011	361	1						*9113	364	1	0.345739E+00	*9115				
*9012	361	1						*9114	367	1	-4.22117E+01	*9116				
*9013	359	1						*9115	368	1	0.101714E+02	*9117				
*9014	360	1						*9116	369	1	-6.33944E+02	*9118				
*9015	361	1						*9117	370	1	0.270474E+04	*9119				
*9016	361	1						*9118	371	1	-7.30833E+04	*9120				
*9017	362	1						*9119	372	1	0.703131E+04					
*9018	358	1						*9017	357	1	-2.30046E+04	*91				

*9143	363	1	-0.243058E+02	*9144	*9252	380	1	-0.113558E+05	*9253	
*9144	364	1	0.583973E+00	*9145	*9253	381	1	0.131793E+05	*9254	
*9145	367	1	0.194037E+04	*9146	DMIG	*VTAIL	382	1	*9255	
*9146	368	1	0.129292E+04	*9147	*9254	357	1	-0.211797E-02	*9256	
*9147	369	1	0.235053E+04	*9148	*9255	358	1	0.196775E-01	*9257	
*9148	370	1	0.756407E+03	*9149	*9256	359	1	-0.154809E+00	*9258	
*9149	371	1	0.771059E+02	*9150	*9257	360	1	0.835219E+00	*9259	
*9150	372	1	-0.600606E+00	*9151	*9258	361	1	0.461861E+01	*9260	
*9151	373	1	0.197780E+01	*9152	*9259	362	1	0.180099E+02	*9261	
*9152	375	1	-0.311950E+05	*9153	*9260	363	1	0.393001E+02	*9262	
*9153	376	1	0.109246E+06		*9261	364	1	0.813303E+03	*9263	
DMIG	*VTAIL	377	1		*9154	*9262	367	1	0.352611E-02	*9264
*9154	357	1	0.317144E+03	*9155	*9263	368	1	-0.218807E-01	*9265	
*9155	358	1	0.219390E+04	*9156	*9264	369	1	0.135616E+00	*9266	
*9156	359	1	0.208271E+04	*9157	*9265	370	1	0.447717E+01	*9267	
*9157	360	1	-0.279276E+05	*9158	*9266	371	1	0.122061E+02	*9268	
*9158	361	1	0.110103E+04	*9159	*9267	372	1	0.882421E+01	*9269	
*9159	362	1	0.550257E+03	*9160	*9268	373	1	-0.479232E+02	*9270	
*9160	363	1	0.811533E+02	*9161	*9269	375	1	0.117696E+00	*9271	
*9161	364	1	-0.211053E+00	*9162	*9270	376	1	0.551862E+00	*9272	
*9162	367	1	0.716540E+03	*9163	*9271	377	1	0.991771E+00	*9273	
*9163	368	1	0.171546E+04	*9164	*9272	378	1	-0.439420E+01	*9274	
*9164	369	1	0.884905E+03	*9165	*9273	379	1	-0.139387E+03	*9275	
*9165	370	1	0.158823E+04	*9166	*9274	380	1	0.164894E+04	*9276	
*9166	371	1	0.561757E+03	*9167	*9275	381	1	-0.475810E+02	*9277	
*9167	372	1	0.690199E+02	*9168	*9276	382	1	0.179643E+04	*9278	
*9168	373	1	0.714289E+01	*9169	DMIG	*VTAIL	383	1	0.311274E-03	*9279
*9169	375	1	0.363683E+04	*9170	*9277	357	1	-0.479934E-02	*9280	
*9170	376	1	-0.187741E+05	*9171	*9278	358	1	0.182105E-01	*9281	
*9171	377	1	0.775790E+05		*9279	359	1	-0.183652E+00	*9282	
DMIG	*VTAIL	378	1		*9172	*9280	360	1	-0.116182E+01	*9283
*9172	357	1	-0.110646E+02	*9173	*9281	361	1	-0.255904E+01	*9284	
*9173	358	1	0.133390E+03	*9174	*9282	362	1	0.111275E+01	*9285	
*9174	359	1	0.711357E+03	*9175	*9283	363	1	-0.358622E+02	*9286	
*9175	360	1	0.202839E+04	*9176	*9284	364	1	-0.179107E-02	*9287	
*9176	361	1	-0.261682E+05	*9177	*9285	367	1	0.109064E-01	*9288	
*9177	362	1	0.139574E+04	*9178	*9286	368	1	-0.797350E-01	*9289	
*9178	363	1	0.872899E+03	*9179	*9287	369	1	-0.865236E+00	*9290	
*9179	364	1	0.177372E+03	*9180	*9288	370	1	-0.258096E+01	*9291	
*9180	367	1	0.741269E+02	*9181	*9289	371	1	-0.318473E+01	*9292	
*9181	368	1	0.487425E+03	*9182	*9290	372	1	-0.249386E+01	*9293	
*9182	369	1	0.121023E+04	*9183	*9291	373	1	0.754849E-01	*9294	
*9183	370	1	0.188910E+04	*9184	*9292	375	1	-0.271090E+00	*9295	
*9184	371	1	0.140030E+04	*9185	*9293	376	1	0.703442E+00	*9296	
*9185	372	1	0.265625E+03	*9186	*9294	377	1	-0.611849E+01	*9297	
*9186	373	1	0.127903E+03	*9187	*9295	378	1	0.611220E+02	*9298	
*9187	375	1	-0.234087E+03	*9188	*9296	379	1	0.131850E+04	*9299	
*9188	376	1	0.178520E+04	*9189	*9297	380	1	-0.653645E+03	*9300	
*9189	377	1	-0.113866E+05	*9190	*9298	381	1	-0.643381E+03		
*9190	378	1	0.701957E+05		*9299	382	1	0.830302E+03		
DMIG	*VTAIL	379	1		*9191	*9300	383	1		
*9191	357	1	0.555097E+00	*9192	DMIG	*VTAIL	384	1		*9301
*9192	358	1	-0.383492E+02	*9193	*9301	357	1	0.265363E+05	*9302	
*9193	359	1	0.749947E+02	*9194	*9302	358	1	0.282354E+05	*9303	
*9194	360	1	0.542347E+03	*9195	*9303	359	1	-0.948610E+04	*9304	
*9195	361	1	0.295398E+04	*9196	*9304	360	1	-0.219314E+04	*9305	
*9196	362	1	-0.161101E+05	*9197	*9305	361	1	-0.475010E+03	*9306	
*9197	363	1	0.237945E+03	*9198	*9306	362	1	0.553337E+02	*9307	
*9198	364	1	0.100000E+04	*9199	*9307	363	1	0.194540E+01	*9308	
*9199	367	1	-0.853152E+01	*9200	*9308	364	1	-0.384202E+01	*9309	
*9200	368	1	0.224612E+02	*9201	*9309	367	1	0.284832E+04	*9310	
*9201	369	1	0.450535E+03	*9202	*9310	368	1	-0.116448E+04	*9311	
*9202	370	1	0.123586E+04	*9203	*9311	369	1	-0.338989E+04	*9312	
*9203	371	1	0.192026E+04	*9204	*9312	370	1	-0.157428E+03	*9313	
*9204	372	1	0.747017E+03	*9205	*9313	371	1	0.485381E+02	*9314	
*9205	373	1	0.679657E+03	*9206	*9314	372	1	-0.926415E+01	*9315	
*9206	375	1	0.693193E+02	*9207	*9315	373	1	-0.122039E+01	*9316	
*9207	376	1	-0.525747E+03	*9208	*9316	375	1	-0.569831E+06	*9317	
*9208	377	1	0.193872E+04	*9209	*9317	376	1	-0.948711E+05	*9318	
*9209	378	1	-0.143803E+05	*9210	*9318	377	1	-0.370792E+04	*9319	
*9210	379	1	0.259716E+05		*9319	378	1	-0.157310E+03	*9320	
DMIG	*VTAIL	380	1		*9211	*9320	379	1	0.111069E+03	*9321
*9211	357	1	-0.661648E-01	*9212	*9321	380	1	-0.182489E+02	*9322	
*9212	358	1	0.121017E+01	*9213	*9322	381	1	0.664130E+01	*9323	
*9213	359	1	-0.388187E+01	*9214	*9323	382	1	0.991842E-01	*9324	
*9214	360	1	0.424170E+02	*9215	*9324	383	1	0.593778E-01	*9325	
*9215	361	1	0.491571E+03	*9216	DMIG	*VTAIL	385	1		*9326
*9216	362	1	0.156464E+04	*9217	*9326	357	1	0.710800E+01	*9327	
*9217	363	1	-0.188062E+05	*9218	*9327	358	1	0.285959E+03	*9328	
*9218	364	1	-0.222663E+04	*9219	*9328	359	1	-0.443238E+03	*9329	
*9219	367	1	0.511802E+00	*9220	*9329	360	1	0.490161E+04	*9330	
*9220	368	1	-0.337097E+01	*9221	*9330	361	1	-0.323369E+03	*9331	
*9221	369	1	0.222733E+02	*9222	*9331	362	1	0.898562E+02	*9332	
*9222	370	1	0.254233E+03	*9223	*9332	363	1	-0.795076E+01	*9333	
*9223	371	1	0.570111E+03	*9224	*9333	364	1	-0.406666E+01	*9334	
*9224	372	1	0.211878E+04	*9225	*9334	367	1	0.952642E+02	*9335	
*9225	373	1	0.303574E+03	*9226	*9335	368	1	0.256148E+03	*9336	
*9226	375	1	-0.236553E+02	*9227	*9336	369	1	0.903557E+03	*9337	
*9227	376	1	0.872011E+02	*9228	*9337	370	1	0.597779E+03	*9338	
*9228	377	1	-0.226099E+03	*9229	*9338	371	1	0.124134E+03	*9339	
*9229	378	1	0.236420E+04	*9230	*9339	372	1	-0.470681E+01	*9340	
*9230	379	1	-0.100636E+05	*9231	*9340	373	1	-0.373720E+00	*9341	
*9231	380	1	0.832375E+05		*9341	375	1	-0.139221E+04	*9342	
DMIG	*VTAIL	381	1		*9232	*9342	376	1	-0.419842E+03	*9343
*9232	357	1	-0.215496E-02	*9234	*9343	377	1	-0.352123E+05	*9344	
*9233	358	1	-0.127980E+00	*9235	*9344	378	1	-0.580778E+03	*9345	
*9234	359	1	-0.670087E+00	*9236	*9345	379	1	0.515640E+02	*9346	
*9235	360	1	-0.448327E+01	*9237	*9346	380	1	0.266160E+01	*9347	
*9236	361	1	-0.502647E+02	*9238	*9347	381	1	-0.203257E+01	*9348	
*9237	362	1	0.467098E+02	*9239	*9348	382	1	-0.981071E-01	*9349	
*9238	363	1	0.163977E+04	*9240	*9349	383	1	-0.714582E-02	*9350	
*9239	364	1	-0.479445E+04	*9241	*9350	384	1	-0.269212E+04	*9351	
*9240	367	1	-0.110671E+00	*9242	*9351	385	1	0.349451E+05		
*9241	368	1	0.669332E+00	*9243	DMIG	*VTAIL	386	1		*9352
*9242	369	1	-0.571058E+01	*9244	*9352	357	1	0.106815E+00	*9353	
*9243	370	1	-0.182164E+02	*9245	*9353	358	1	-0.224760E+02	*9354	
*9244	372	1	0.460481E+02	*9246	*9354	359	1	0.196095E+03	*9355	
*9245	373	1	0.878765E+02	*9247	*9355	360	1	-0.359483E+03	*9356	
*9246	373	1	0.449404E+03	*9248	*9356	361	1	0.606719E+04	*9357	
*9247	375	1	0.842499E+01	*9249	*9357	362	1	0.		

*9361	368	1	0.496996E+02	*9362	DMIG	*VTAIL	391	1	*9471	0.137165E+04	*9471
*9362	369	1	0.352965E+03	*9363	*9471	385	1	*9472	-0.273365E+04	*9472	
*9363	370	1	-0.142282E+03	*9364	*9472	386	1	*9473	0.123460E+04	*9473	
*9364	371	1	0.321219E+03	*9365	*9473	387	1	*9474	0.729919E+02	*9474	
*9365	372	1	0.854219E+02	*9366	*9474	389	1	*9475	-0.160803E+04	*9475	
*9366	373	1	0.160192E+02	*9367	*9475	390	1	*9476	0.320895E+04	*9476	
*9367	375	1	0.323717E+03	*9368	*9476	391	1	*9477	0.123460E+04	*9477	
*9368	376	1	-0.318383E+02	*9369	*9477	386	1	*9478	-0.183606E+04	*9478	
*9369	377	1	-0.420586E+03	*9370	*9478	387	1	*9480	0.532735E+03	*9480	
*9370	378	1	-0.314870E+05	*9371	*9480	389	1	*9481	-0.270690E+02	*9481	
*9371	379	1	-0.689850E+03	*9372	*9481	390	1	*9482	0.120338E+03	*9482	
*9372	380	1	0.423422E+01	*9373	*9482	391	1	*9483	-0.161773E+04	*9483	
*9373	381	1	0.102897E+02	*9374	*9483	392	1	*9484	0.207529E+04		
*9374	382	1	0.527408E+00	*9375	*9484	393	1	*9485	0.571031E+03	*9484	
*9375	383	1	0.337155E-01	*9376	*9485	397	1	*9486	-0.673609E+03	*9485	
*9376	384	1	0.643374E+03	*9377	*9486	389	1	*9487	0.223540E+01	*9486	
*9377	385	1	-0.357044E+04	*9378	*9487	391	1	*9488	-0.993771E+01	*9487	
*9378	386	1	0.322247E+05	*9379	*9488	391	1	*9489	0.711305E+02	*9489	
DMIG	*VTAIL	387	1	-0.338835E+00	*9380	*9489	392	1	*9490	-0.482110E+03	*9490
*9379	357	1	-0.546516E+01	*9381	*9490	393	1	*9491	0.521340E+03		
*9380	358	1	0.188194E+00	*9382	*9491	357	1	*9492	-0.173625E+05	*9492	
*9381	359	1	0.399533E+01	*9383	*9492	358	1	*9493	-0.204728E+04	*9493	
*9382	360	1	0.777587E+02	*9384	*9493	359	1	*9494	0.964342E+04	*9494	
*9383	361	1	-0.905801E+03	*9385	*9494	360	1	*9495	0.398450E+03	*9496	
*9384	362	1	0.475235E+04	*9386	*9495	361	1	*9496	-0.464190E+02	*9497	
*9385	363	1	0.368288E+04	*9387	*9496	362	1	*9497	0.243519E+01	*9498	
*9386	364	1	-0.149039E+01	*9388	*9497	363	1	*9498	0.189718E+01	*9499	
*9387	367	1	0.885053E+01	*9389	*9499	364	1	*9500	-0.763702E+03	*9500	
*9388	368	1	0.672121E+01	*9390	*9500	368	1	*9501	0.453518E+04	*9501	
*9389	369	1	-0.894053E+03	*9391	*9501	369	1	*9502	0.344413E+04	*9502	
*9390	370	1	0.462911E+02	*9392	*9502	370	1	*9503	0.237204E+03	*9503	
*9391	371	1	-0.849053E+03	*9393	*9503	371	1	*9504	-0.435070E+02	*9504	
*9392	372	1	0.795566E+04	*9394	*9504	372	1	*9505	0.407663E+01	*9505	
*9393	373	1	0.974734E+05	*9395	*9505	373	1	*9506	0.508555E+00	*9506	
*9394	375	1	-0.966022E+02	*9396	*9506	375	1	*9507	-0.443406E+06	*9507	
*9395	376	1	0.589416E+00	*9397	*9507	376	1	*9508	0.504302E+05	*9508	
*9396	377	1	0.481116E+01	*9398	*9508	377	1	*9509	0.246556E+04	*9509	
*9397	378	1	-0.891686E+03	*9399	*9509	378	1	*9510	-0.456917E+02	*9510	
*9398	379	1	-0.753510E+03	*9400	*9510	379	1	*9511	-0.386113E+02	*9511	
*9399	380	1	-0.204675E+04	*9401	*9511	380	1	*9512	-0.104880E+01	*9512	
*9400	381	1	0.508574E+05	*9402	*9512	381	1	*9513	0.260603E+00	*9513	
*9401	382	1	-0.608804E+07	*9403	*9513	382	1	*9514	-0.311963E+02	*9514	
*9402	383	1	0.551832E+07	*9404	*9514	383	1	*9515	0.282769E+02	*9515	
*9403	384	1	-0.178513E+03	*9405	*9515	384	1	*9516	-0.968300E+06	*9516	
*9404	385	1	0.105938E+04	*9406	*9516	385	1	*9517	0.197004E+04	*9517	
*9405	386	1	-0.419783E+04	*9407	*9517	386	1	*9518	-0.358031E+03	*9518	
*9406	387	1	0.497765E+04	*9408	*9518	387	1	*9519	0.100278E+03	*9519	
DMIG	*VTAIL	388	1	0.396140E+01	*9409	*9519	388	1	*9520	-0.101088E+02	*9520
*9407	357	1	-0.893404E+01	*9410	*9520	389	1	*9521	-0.305457E+04	*9521	
*9408	358	1	0.845446E+00	*9411	*9521	406	1	*9522	0.176490E+07		
*9409	359	1	0.502871E+02	*9412	DMIG	*VTAIL	407	1	*9523	-0.919030E+05	*9554
*9410	360	1	-0.468879E+01	*9413	*9524	357	1	*9525	0.728130E+04	*9555	
*9411	361	1	0.250515E+03	*9414	*9525	358	1	*9526	-0.231467E+03	*9556	
*9412	362	1	0.874634E+04	*9415	*9526	359	1	*9527	-0.841305E+02	*9557	
*9413	363	1	0.134833B+04	*9416	*9527	360	1	*9528	0.592527E+01	*9558	
*9414	364	1	0.310222E+01	*9417	*9528	361	1	*9529	-0.984070E+00	*9559	
*9415	367	1	-0.236734E+00	*9418	*9529	362	1	*9530	0.155367E+00	*9561	
*9416	368	1	0.236526E+01	*9419	*9530	363	1	*9531	-0.501667E+05	*9562	
*9417	369	1	-0.121702E+01	*9420	*9531	364	1	*9532	0.663939E+03	*9563	
*9418	370	1	0.161871E+02	*9421	*9532	365	1	*9533	-0.918211E+02	*9564	
*9419	371	1	0.211136E+02	*9422	*9533	366	1	*9534	-0.938795E+02	*9565	
*9420	372	1	-0.961292E+03	*9423	*9534	367	1	*9535	-0.891667E+00	*9566	
*9421	373	1	0.278446E+03	*9424	*9535	368	1	*9536	0.955200E+00	*9567	
*9422	375	1	0.102905E+02	*9423	*9536	369	1	*9537	-0.124012E+01	*9568	
*9423	376	1	-0.286084E+01	*9424	*9537	370	1	*9538	-0.290253E+01	*9570	
*9424	377	1	0.459790E+01	*9425	*9538	371	1	*9539	0.14644135E+03	*9571	
*9425	378	1	-0.236562E+02	*9426	*9539	372	1	*9540	-0.984231B+02	*9572	
*9426	379	1	-0.362756E+03	*9427	*9540	373	1	*9541	0.925670E+00	*9573	
*9427	380	1	-0.513037E+05	*9428	*9541	374	1	*9542	0.568770E+01	*9574	
*9428	381	1	-0.124016E+04	*9429	*9542	375	1	*9543	-0.965196E+01	*9575	
*9429	382	1	-0.303660E+04	*9430	*9543	376	1	*9544	0.253072E+01	*9576	
*9430	383	1	-0.859051E+03	*9431	*9544	377	1	*9545	-0.290253E+01	*9577	
*9431	384	1	0.185899E+02	*9432	*9545	378	1	*9546	0.14644135E+03	*9578	
*9432	385	1	-0.106061E+03	*9433	*9546	379	1	*9547	-0.589231B+02	*9579	
*9433	386	1	0.590076E+03	*9434	*9547	378	1	*9548	0.925670E+00	*9580	
*9434	387	1	-0.160275E+04	*9435	*9548	379	1	*9549	0.568770E+01	*9581	
*9435	388	1	0.4833130B+05	*9436	*9549	380	1	*9550	-0.965196E+01	*9582	
DMIG	*VTAIL	389	1	0.103213E+02	*9437	*9550	381	1	*9551	0.225246E+03	*9583
*9436	357	1	0.166475E+01	*9438	*9551	382	1	*9552	-0.230353E+03	*9584	
*9437	358	1	-0.573260E+01	*9439	*9552	383	1	*9553	0.675815E+02	*9585	
*9438	359	1	-0.121702E+01	*9440	*9553	384	1	*9554	-0.939438E+00	*9586	
*9439	360	1	0.236526E+01	*9441	*9554	385	1	*9555	0.715953E+00	*9587	
*9440	361	1	-0.236861E+00	*9442	*9555	386	1	*9556	-0.379983E+01	*9588	
*9441	362	1	0.275941E+01	*9443	*9556	387	1	*9557	-0.102725E+01	*9589	
*9442	363	1	-0.144762E+02	*9444	*9557	388	1	*9558	0.115747E+01	*9590	
*9443	364	1	-0.112184E+02	*9445	*9558	389	1	*9559	-0.194711E+04	*9591	
*9444	367	1	0.453998E+00	*9446	*9559	406	1	*9560	0.676867E+06	*9586	
*9445	368	1	-0.269597E+01	*9447	*9560	407	1	*9561	-0.280960E+05		
*9446	369	1	-0.204739E+01	*9448	*9562	357	1	*9563	0.160270E+08	*9522	
*9447	370	1	0.141008E+00	*9449	*9563	358	1	*9564	-0.918511E+02	*9526	
*9448	371	1	0.258631E+01	*9450	*9564	359	1	*9565	0.160290E+02	*9528	
*9449	372	1	-0.242338E+02	*9451	*9565	360	1	*9566	-0.105740E+02	*9529	
*9450	373	1	-0.297737E+03	*9452	*9566	361	1	*9567	-0.110634E+01	*9530	
*9451	375	1	0.292616E+04	*9453	*9567	362	1	*9568	-0.804513B+06	*9531	
*9452	376	1	-0.299786E+02	*9454	*9568	363	1	*9569	-0.532051E+05	*9532	
*9453	377	1	-0.146567E+01	*9455	*9569	364	1	*9570	-0.187041E+04	*9533	
*9454	378	1	0.271617E+01	*9456	*9570	365	1	*9571	-0.364230E+03	*9534	
*9455	379	1	0.229527E+01	*9457	*9571	366	1	*9572	-0.204481E+03	*9535	
*9456	380	1	0.623463E+03	*9458	*9572	367	1	*9573	-0.111039E+03	*9536	
*9457	381	1	-0.154917E+03	*9459	*9						

*9546	384	1	0.106276E+05	*9547	*9654	#08	1	-.110606E+05	*9655	+9655	
*9547	385	1	-.226352E+02	*9548	*9655	409	5	0.437083E+07		+EIG1	
*9548	386	1	0.519700E+02	*9549	EIGR	1	MGIV	0.	60.		
*9549	387	1	0.257476E+00	*9550	GRID	1	5	-136.6059.331	.000	0	
*9550	388	1	0.673053E+00	*9551	GRID	2	5	-131.7509.602	.000	0	
*9551	389	1	-.784298E+01	*9552	GRID	3	5	-100.7501.331	.000	0	
*9552	406	1	0.131935E+05	*9553	GRID	4	5	-75.750 12.725	.000	0	
*9553	407	5	0.195301E+08	*9587	GRID	5	5	-40.750 14.678	.000	0	
DMIG	*VTAIL	408	1	0.744264E+03	*9588	GRID	6	5	0.000 17.047	.000	0
*9587	357	1	0.120044E+03	*9589	GRID	7	5	24.947 18.341	.000	0	
*9588	358	1	-.413376E+03	*9590	GRID	8	5	-141.0943.076	.000	0	
*9589	359	1	0.877589E+02	*9591	GRID	9	0	-170.615-371.062	.000	5	
*9590	360	1	-.170800E+02	*9592	GRID	10	5	-100.7500.353	.000	0	
*9591	361	1	0.198980E+01	*9593	GRID	11	0	-145.429-352.988	.000	5	
*9592	362	1	0.104387E+00	*9594	GRID	12	5	-75.750 3.524	.000	0	
*9593	363	1	-.808958E-01	*9595	GRID	13	0	-125.118-336.412	.000	5	
*9594	364	1	0.327336E+02	*9596	GRID	14	5	-40.750 3.763	.000	0	
*9595	367	1	-.194405E+03	*9597	GRID	15	0	-96.682 -318.006	.000	5	
*9596	368	1	0.214221E+03	*9598	GRID	16	5	0.000 4.054	.000	0	
*9597	369	1	-.147636E+03	*9599	GRID	17	0	-63.574 -294.247	.000	5	
*9598	370	1	0.101680E+02	*9600	GRID	18	5	14.758 4.143	.000	0	
*9599	371	1	0.186498E+01	*9601	GRID	19	0	-180.000-381.378	.000	0	
*9600	372	1	0.174749E+00	*9602	GRID	20	0	-168.385-374.169	.000	1	
*9601	373	1	-.214697E-01	*9603	GRID	21	0	-157.000-366.154	.000	0	
*9602	375	1	0.211004E+05	*9604	GRID	22	0	-147.640-359.565	.000	0	
*9603	376	1	-.216175E+04	*9605	GRID	23	0	-143.035-356.324	.000	1	
*9604	377	1	0.105689E+03	*9606	GRID	24	0	-139.738-354.003	.000	0	
*9605	378	1	0.195862E+01	*9607	GRID	25	0	-122.591-341.932	.000	1	
*9606	379	1	0.165511E+01	*9608	GRID	26	0	-120.000-340.108	.000	0	
*9607	380	1	0.449577E-01	*9609	GRID	27	0	-93.970 -321.785	.000	1	
*9608	381	1	-.111710E-01	*9610	GRID	29	0	-86.000 -316.174	.000	0	
*9609	382	1	0.133726E-03	*9611	GRID	30	0	-60.647 -298.327	.000	1	
*9610	383	1	-.121212E-03	*9612	GRID	31	0	-41.500 -293.800	.000	0	
*9611	384	1	0.418267E+05	*9613	GRID	32	0	-54.216 -293.800	.000	0	
*9612	385	1	0.214221E+03	*9614	GRID	33	0	-41.500 -293.800	.000	0	
*9613	386	1	-.445492E+02	*9615	GRID	34	0	-25.500 -293.800	.000	0	
*9614	387	1	0.145153E+02	*9616	GRID	35	0	-25.500 -293.800	.000	0	
*9615	388	1	0.144600E+01	*9617	GRID	36	0	.000 -293.80	.000	0	
*9616	389	1	0.421215E+03	*9618	GRID	37	0	-41.500 -308.500	.000	0	
*9617	406	1	-.361694E+06	*9619	GRID	38	0	-54.216 -310.784	.000	0	
*9618	407	5	0.565558E+03	*9620	GRID	39	0	-41.500 -308.500	.000	0	
*9619	407	1	0.834648E+02		GRID	40	0	-25.500 -308.500	.000	0	
*9620	408	1	0.109547E+06	*9656	GRID	41	0	-25.500 -308.500	.000	0	
DMIG	*VTAIL	409	1	-.262206E+05	*9657	GRID	42	0	.000 -308.50	.000	0
*9656	357	1	0.103588E+04	*9658	GRID	44	0	-86.000 -332.494	.000	0	
*9657	358	1	0.214164E+04	*9659	GRID	45	0	-41.500 -324.500	.000	0	
*9658	359	1	0.293531E+03	*9660	GRID	46	0	-54.216 -326.784	.000	0	
*9659	360	1	0.269486E+02	*9661	GRID	47	0	-41.500 -324.500	.000	0	
*9660	361	1	-.242846E+01	*9662	GRID	48	0	-25.500 -324.500	.000	0	
*9661	362	1	0.525678E-01	*9663	GRID	49	0	-25.500 -324.500	.000	0	
*9662	363	1	0.172746E+00	*9664	GRID	50	0	.000 -324.50	.000	0	
*9663	364	1	0.323348E+04	*9665	GRID	51	0	-139.738-358.146	.000	0	
*9664	367	1	0.215706E+04	*9666	GRID	52	0	-120.000-354.601	.000	0	
*9665	368	1	0.503979E-03	*9667	GRID	53	0	-86.000 -348.494	.000	0	
*9666	369	1	0.246870E+02	*9668	GRID	54	0	-41.500 -340.500	.000	0	
*9667	370	1	-.255333E+01	*9669	GRID	55	0	-54.216 -342.784	.000	0	
*9668	371	1	0.824261E+00	*9670	GRID	56	0	-41.500 -340.500	.000	0	
*9669	372	1	0.127325E-01	*9671	GRID	57	0	-25.500 -340.500	.000	0	
*9670	373	1	0.458756E+05	*9672	GRID	58	0	-25.500 -340.500	.000	0	
*9671	375	1	0.207304E+03	*9673	GRID	59	0	.000 -340.50	.000	0	
*9672	376	1	0.280582E+02	*9674	GRID	60	0	-168.385-379.292	.000	0	
*9673	377	1	-.203789E+02	*9675	GRID	61	0	-157.000-377.247	.000	0	
*9674	378	1	0.339806E+01	*9676	GRID	62	0	-139.738-374.146	.000	0	
*9675	379	1	0.120555E+00	*9677	GRID	63	0	-131.000-372.576	.000	0	
*9676	380	1	0.420144E-01	*9678	GRID	64	0	-120.000-370.601	.000	0	
*9677	381	1	0.823926E-04	*9679	GRID	65	0	-86.000 -364.494	.000	0	
*9678	392	1	0.411672E-03	*9680	GRID	66	0	-41.500 -356.500	.000	0	
*9679	383	1	0.502328E+05	*9681	GRID	67	0	-54.216 -358.784	.000	0	
*9680	384	1	0.124228E+01	*9682	GRID	68	0	-41.500 -356.500	.000	0	
*9681	385	1	-.178476E+01	*9683	GRID	69	0	-25.500 -356.500	.000	0	
*9682	386	1	0.785608E+00	*9684	GRID	70	0	-25.500 -356.500	.000	0	
*9683	387	1	0.666356E-01	*9685	GRID	71	0	.000 -356.50	.000	0	
*9684	388	1	0.239304E+02	*9686	GRID	72	0	-180.000-398.678	.000	0	
*9685	389	1	0.402560E+05	*9687	GRID	73	0	-168.385-396.592	.000	0	
*9686	406	1	0.438355E+05	*9688	GRID	74	0	-157.000-394.547	.000	0	
*9687	407	5	0.785184E+04	*9689	GRID	75	0	-139.738-391.416	.000	0	
*9688	407	1	0.172562E+04	*9690	GRID	76	0	-131.000-389.876	.000	7	
*9689	409	5	0.179613E+06	*9691	GRID	77	0	-120.000-387.901	.000	0	
*9691	409	1	0.431661E+05	*9692	GRID	78	0	-86.000 -381.794	.000	0	
DMIG	*VTAIL	409	5	-.108056E+06	*9621	GRID	79	0	-29.250 -417.400	.000	0
*9621	357	1	0.369272E+04	*9622	GRID	80	0	-54.216 -376.084	.000	0	
*9622	358	1	0.168866E+05	*9623	GRID	81	0	-41.500 -373.800	.000	7	
*9623	359	1	-.236393E+04	*9624	GRID	82	0	-25.500 -373.800	.000	0	
*9624	360	1	0.229630E+03	*9625	GRID	83	0	-25.500 -373.800	.000	0	
*9625	361	1	0.222114E+02	*9626	GRID	84	0	.000 -373.80	.000	0	
*9626	362	1	0.222114E+02	*9627	GRID	85	0	-180.000-406.675	.000	0	
*9627	363	1	0.744120E+00	*9628	GRID	86	0	-168.385-406.191	.000	0	
*9628	364	1	-.145670E+01	*9629	GRID	87	0	-157.000-405.717	.000	0	
*9629	365	1	0.615575E+04	*9630	GRID	88	0	-139.738-404.997	.000	0	
*9630	368	1	-.153980E+05	*9631	GRID	89	0	-139.738-393.695	.000	0	
*9631	369	1	0.392419E+04	*9632	GRID	90	0	-130.626-392.267	.000	0	
*9632	370	1	-.182427E+03	*9633	GRID	91	0	-111.224-389.227	.000	0	
*9633	371	1	0.179957E+02	*9634	GRID	92	0	-85.970 -385.270	.000	0	
*9634	372	1	-.376324E+01	*9635	GRID	93	0	-53.000 -380.104	.000	0	
*9635	373	1	0.241942E+00	*9636	GRID	94	0	-29.250 -373.800	.000	0	
*9636	375	1	-.145521E+06	*9637	GRID	95	0	-41.500 -378.302	.000	0	
*9637	376	1	0.194645E+04	*9638	GRID	96	0	-139.738-397.461	.000	0	
*9638	377	1	-.813680E+03	*9639	GRID	97	0	-129.992-396.307	.000	0	
*9639	378	1	0.145115E+03	*9640	GRID	98	0	-110.476-393.998	.000	0	
*9640	379	1	0.267615E+02	*9641	GRID	99	0	-85.073 -390.992	.000	0	
*9641	380	1	0.128482E+01	*9642	GRID	100	0	-53.000 -387.196	.000	0	
*9642	381	1	-.454159E+00	*9643	GRID	101	0	-41.500 -385.835	.000	0	
*9643	382	1	0.347133E-02	*9644	GRID	102	0	-139.738-401.269	.000	0	
*9644	383	1	-.417601E-02	*9645	GRID	103	0	-129.345-400.438	.000	0	
*9645	384	1	0.184205E+06	*9646	GRID	104	0	-109.713-398.967	.000	0	
*9646	385	1	-.595504E+02	*9647	GRID	105	0	-84.160 -			

GRID	113	0	-41.500	-400.902.000	0		GRID	360	0	.000	-501.18481.850	0
GRID	114	0	-41.500	-417.400.000	0		GRID	361	0	.000	-518.008101.371	0
GRID	115	0	-25.500	-417.400.000	0		GRID	362	0	.000	-527.582112.479	0
GRID	116	0	-25.500	-417.400.000	0		GRID	363	0	.000	-534.495120.500	0
GRID	117	0	.000	-417.400.000	0		GRID	364	0	.000	-538.374125.000	0
GRID	118	0	-39.431	-373.800.000	0		GRID	367	0	.000	-446.10044.849	0
GRID	119	0	-38.792	-377.878.000	7		GRID	368	0	.000	-472.31270.354	0
GRID	120	0	-32.600	-417.400.000	0		GRID	369	0	.000	-491.06988.605	0
GRID	121	0	-41.500	-373.800.000	0		GRID	370	0	.000	-509.812106.844	0
GRID	122	0	-120.926.390.747.000	0			GRID	371	0	.000	-520.479117.222	0
GRID	123	0	-101.524.387.707.000	0			GRID	372	0	.000	-523.847120.500	0
GRID	124	0	-70.415.382.833.000	0			GRID	373	0	.000	-528.472125.000	0
GRID	125	0	-120.235.395.153.000	0			GRID	375	0	.000	-492.59445.000	0
GRID	126	0	-100.719.392.843.000	0			GRID	376	0	.000	-498.20753.064	0
GRID	127	0	-69.427	-389.140.000	0		GRID	377	0	.000	-512.83174.074	0
GRID	128	0	-119.530.399.653.000	0			GRID	378	0	.000	-527.44695.070	0
GRID	129	0	-99.898	-398.082.000	0		GRID	379	0	.000	-535.762107.018	0
GRID	130	0	-68.420	-395.564.000	0		GRID	380	0	.000	-545.147120.500	0
GRID	131	0	-118.830.404.125.000	0			GRID	381	0	.000	-548.279125.000	0
GRID	132	0	-99.081	-403.302.000	0		GRID	382	0	.000	-560.736120.500	0
GRID	133	0	-67.414	-401.982.000	0		GRID	383	0	.000	-563.088125.000	0
GRID	134	0	-139.738.394.695.000	7			GRID	384	0	.000	-498.05345.000	0
GRID	135	0	-130.473.393.243.000	7			GRID	385	0	.000	-516.03771.933	0
GRID	136	0	-120.773.391.723.000	7			GRID	386	0	.000	-530.24093.204	0
GRID	137	0	-111.071.390.203.000	7			GRID	387	0	.000	-538.321105.309	0
GRID	138	0	-101.371.388.683.000	7			GRID	388	0	.000	-548.465120.500	0
GRID	139	0	-85.817	-386.246.000	7		GRID	389	0	.000	-521.28945.000	0
GRID	140	0	-70.262	-383.809.000	7		GRID	390	0	.000	-530.36462.367	0
GRID	141	0	-53.000	-381.104.000	7		GRID	391	0	.000	-542.27685.168	0
GRID	142	0	-41.500	-379.302.000	7		GRID	392	0	.000	-549.05598.142	0
GRID	143	0	-180.000	-389.378.000	0		GRID	393	0	.000	-560.736120.500	0
GRID	153	0	.000	-100.000.000	0		GRID	405	0	.000	-500.00 .000	0
GRID	154	0	.000	-160.000.000	0		GRID	406	0	.000	-498.24941.224	0
GRID	155	0	.000	-200.000.000	0		GRID	407	0	.000	-446.10025.500	0
GRID	156	0	.000	-252.500.000	0		GRID	408	0	.000	-509.89233.450	0
GRID	163	0	.000	-60.000.000	0		GRID	409	0	.000	-479.02125.500	0
GRID	164	0	.000	-78.800.000	0		GRID	410	0	.000	-426.40 .000	0
GRID	173	5	-116.25010.466	.000	0		GRID	431	0	.000	-351.70 .000	0
GRID	174	5	-88.250	12.029	.000		GRID	437	0	.000	-325.40 .000	0
GRID	175	5	-58.250	13.701	.000		GRID	458	0	.000	-266.92 .000	0
GRID	176	5	-19.500	15.863	.000		GRID	459	0	.000	-274.55 .000	0
GRID	177	5	-116.2503.247	.000	0		GRID	464	0	.000	-29.250	-492.500.000
GRID	178	5	-88.250	3.438	.000		GRID	465	0	.000	-40.750	-492.500.000
GRID	179	5	-58.250	3.643	.000		GRID	466	0	.000	-29.250	-502.250.000
GRID	180	5	-19.500	3.908	.000		GRID	467	0	.000	-40.750	-502.250.000
GRID	181	0	-71.000	-305.615.000	0		GRID	501	0	.000	-54.702	-473.0130.
GRID	182	0	-71.000	-313.799.000	0		GRID	502	0	.000	-74.653	-488.0660.
GRID	183	0	-71.000	-329.799.000	0		GRID	503	0	.000	-87.028	-497.4020.
GRID	184	0	-71.000	-345.799.000	0		GRID	504	0	.000	-97.869	-505.5820.
GRID	185	0	-71.000	-361.799.000	0		GRID	505	0	.000	-106.606	-512.1740.
GRID	186	0	-71.000	-379.099.000	7		GRID	506	0	.000	-41.5	-480.2760.
GRID	187	0	-102.000	-327.437.000	0		GRID	507	0	.000	-62.928	-493.9580.
GRID	188	0	-102.000	-335.367.000	0		GRID	508	0	.000	-76.851	-503.2100.
GRID	189	0	-102.000	-351.367.000	0		GRID	509	0	.000	-88.453	-510.9200.
GRID	190	0	-102.000	-367.367.000	0		GRID	510	0	.000	-99.212	-518.0690.
GRID	191	0	-102.000	-384.667.000	7		GRID	511	0	.000	-110.127	-525.0140.
GRID	192	0	-131.000	-347.852.000	0		GRID	512	0	.000	-49.726	-501.2210.
GRID	193	0	-131.000	-356.576.000	0		GRID	513	0	.000	-65.126	-509.1020.
GRID	194	5	-131.7503.141	.000	0		GRID	514	0	.000	-78.276	-516.7270.
GRID	195	0	.000	-385.600.000	0		GRID	515	0	.000	-69.796	-523.4070.
GRID	196	0	.000	-447.000.000	0		GRID	516	0	.000	-102.733	-530.9090.
GRID	233	0	-41.500	-497.5000.	0		GRID	517	0	.000	-41.5	-519.3830.
GRID	241	0	-31.810	-497.500.000	0		GRID	518	0	.000	-49.726	-523.1040.
GRID	242	0	-168.385	-387.292.000	0		GRID	519	0	.000	-65.680	-527.8750.
GRID	243	0	-157.000	-385.247.000	0		GRID	520	0	.000	-78.973	-531.8050.
GRID	244	0	-139.738	-382.146.000	0		GRID	521	0	.000	-91.3	-535.5370.
GRID	245	0	-131.000	-380.576.000	0		GRID	522	0	.000	-106.495	-540.3680.
GRID	251	0	-41.500	-463.0520.	0		GRID	523	0	.000	-50.28	-541.8760.
GRID	252	0	-67.903	-482.9730.	0		GRID	524	0	.000	-66.376	-542.9980.
GRID	253	0	-81.403	-493.1590.	0		GRID	525	0	.000	-80.477	-544.0080.
GRID	254	0	-92.653	-501.6460.	0		GRID	526	0	.000	-95.062	-544.9960.
GRID	255	0	-103.085	-509.5170.	0		GRID	701	3	0	0	0.
GRID	256	0	-110.127	-514.8300.	0		GRID	702	3	100.	0.	0.
GRID	257	0	-57.952	-504.9420.	0		GRID	703	3	0.	0.	-100.
GRID	258	0	-72.293	-513.2610.	0		GRID	1001	5	-136.6059.331	.355	0
GRID	259	0	-84.253	-520.1930.	0		GRID	1002	5	-131.7509.602	.382	0
GRID	260	0	-95.338	-526.6210.	0		GRID	1003	5	-100.75011.331	.560	0
GRID	261	0	-110.127	-535.1970.	0		GRID	1004	5	-75.750	-12.725	.700
GRID	262	0	-41.500	-541.2650.	0		GRID	1005	5	-40.750	14.678	.895
GRID	263	0	-59.061	-542.4880.	0		GRID	1006	5	0.000	-17.047	1.115
GRID	264	0	-73.693	-543.5080.	0		GRID	1007	5	24.947	18.341	1.245
GRID	265	0	-87.261	-544.4530.	0		GRID	1008	5	-141.0943.076	.845	0
GRID	266	0	-102.862	-545.5400.	0		GRID	1010	5	-100.7503.353	1.150	0
GRID	267	0	.000	-153.25	.000		GRID	1012	5	-75.750	3.524	1.410
GRID	268	0	.000	-276.42	.000		GRID	1014	5	-40.750	3.763	1.765
GRID	271	0	-36.000	-469.194.000	0		GRID	1016	5	0.000	4.054	2.190
GRID	272	0	-36.000	-497.500.000	0		GRID	1018	5	14.758	4.143	2.080
GRID	273	0	-29.250	-497.500.000	0		GRID	1019	0	-180.000	-381.378.790	0
GRID	274	0	-40.750	-497.500.000	0		GRID	1020	0	-168.385	-374.169.965	1
GRID	275	0	-40.750	-479.550.000	0		GRID	1021	0	-157.000	-366.1541.156	0
GRID	276	0	-29.250	-479.550.000	0		GRID	1022	0	-147.640	-359.5651.284	0
GRID	277	0	-29.250	-479.550.000	0		GRID	1023	0	-143.035	-356.3241.358	1
GRID	278	0	-40.750	-469.194.000	0		GRID	1024	0	-139.738	-354.0031.400	0
GRID	279	0	-29.250	-462.820.000	0		GRID	1025	0	-122.591	-341.9321.635	1
GRID	280	0	-40.750	-462.820.000	0		GRID	1026	0	-120.000	-340.1081.663	0
GRID	281	0	.000	-479.55	.000		GRID	1027	0	-93.970	-321.7852.018	1
GRID	282	0	.000	-462.82	.000		GRID	1029	0	-86.000	-316.1742.124	0
GRID	283	0	.000	-446.10	.000		GRID	1030	0	-60.647	-298.3272.534	1
GRID	284	0	.000	-447.00	.000		GRID	1031	0	-41.500		

GRID	1054	0	-41.500	-340.5005.450	0		GRID	1280	0	-40.750	-462.8205.500	0			
GRID	1055	0	-54.216	-342.7842.426	0		GRID	1290	0	-29.250	-462.8207.000	0			
GRID	1056	0	-41.500	-340.5002.598	0		GRID	1292	0	-40.750	-446.1005.650	0			
GRID	1057	0	-25.500	-340.50010.750	0		GRID	1293	0	-29.250	-446.1007.000	0			
GRID	1060	0	-168.385-379.292.984	0			GRID	1464	0	-29.250	-492.5004.500	0			
GRID	1061	0	-157.000-377.2471.108	0			GRID	1465	0	-40.750	-492.5004.750	0			
GRID	1062	0	-139.738-374.1461.256	0			GRID	1466	0	-29.250	-502.2503.000	0			
GRID	1063	0	-131.000-372.5761.328	0			GRID	1467	0	-40.750	-502.2504.250	0			
GRID	1064	0	-120.000-370.6011.418	0			GRID	1501	0	-54.702	-473.0130.868	0			
GRID	1065	0	-86.000	-364.4941.676	0		GRID	1502	0	-74.653	-488.0660.638	0			
GRID	1066	0	-41.500	-356.5005.800	0		GRID	1503	0	-87.028	-497.4020.495	0			
GRID	1067	0	-54.216	-358.7841.998	0		GRID	1504	0	-97.869	-505.5820.370	0			
GRID	1068	0	-41.500	-356.5002.028	0		GRID	1505	0	-106.806	-512.1740.268	0			
GRID	1069	0	-25.500	-356.50010.950	0		GRID	1506	0	-41.5	-480.2761.906	0			
GRID	1072	0	-180.000-398.678.330	0			GRID	1507	0	-62.928	-493.9581.610	0			
GRID	1073	0	-168.385-396.592.415	0			GRID	1508	0	-76.851	-503.2101.180	0			
GRID	1074	0	-157.000-394.547.508	0			GRID	1509	0	-88.453	-510.9200.934	0			
GRID	1075	0	-139.738-391.446.645	0			GRID	1510	0	-99.212	-518.0690.700	0			
GRID	1076	0	-131.000-389.876.706	7			GRID	1511	0	-110.127	-525.0140.417	0			
GRID	1077	0	-120.000-387.901.796	0			GRID	1512	0	-49.726	-501.2212.646	0			
GRID	1078	0	-86.000	-381.7941.039	0		GRID	1513	0	-65.126	-509.1022.152	0			
GRID	1079	0	-29.250	-417.4009.000	0		GRID	1514	0	-78.276	-516.7271.619	0			
GRID	1080	0	-54.216	-376.0841.264	0		GRID	1515	0	-89.796	-523.4071.264	0			
GRID	1081	0	-41.500	-373.8001.364	7		GRID	1516	0	-102.733-530.9090.848	0				
GRID	1082	0	-25.500	-373.80011.100	0		GRID	1517	0	-41.5	-519.3831.812	0			
GRID	1085	0	-180.000-406.675.075	0			GRID	1518	0	-49.726	-523.1041.668	0			
GRID	1086	0	-168.385-406.191.090	0			GRID	1519	0	-65.680	-527.8751.236	0			
GRID	1087	0	-157.000-405.717.115	0			GRID	1520	0	-78.973	-531.8050.984	0			
GRID	1088	0	-139.738-404.997.145	0			GRID	1521	0	-91.3	-535.5370.745	0			
GRID	1094	0	-29.250	-373.8000.000	0		GRID	1522	0	-106.495	-540.3680.427	0			
GRID	1096	0	-139.738-397.461.429	0			GRID	1523	0	-50.28	-541.8760.752	0			
GRID	1097	0	-129.992-396.307.471	0			GRID	1524	0	-66.376	-542.9980.600	0			
GRID	1098	0	-110.476-393.998.557	0			GRID	1525	0	-80.477	-544.0080.465	0			
GRID	1099	0	-85.073	-390.992.669	0			GRID	1526	0	-95.062	-544.9960.324	0		
GRID	1100	0	-53.000	-387.196.810	0			GRID	2001	5	-136.6059.331	-3.355	0		
GRID	1101	0	-41.500	-385.6352.659	0			GRID	2002	5	-131.7509.602	-3.382	0		
GRID	1102	0	-139.738-401.269.288	0			GRID	2003	5	-100.7501.331	-560	0			
GRID	1103	0	-129.345-400.438.318	0			GRID	2004	5	-75.750	12.725	-700			
GRID	1104	0	-109.713-398.867.377	0			GRID	2005	5	-40.750	14.678	-895			
GRID	1105	0	-84.160	-396.823.453	0			GRID	2006	5	0.000	17.047	-1.115		
GRID	1106	0	-53.000	-394.330.545	0			GRID	2007	5	24.947	18.341	-1.245		
GRID	1107	0	-41.500	-393.4101.787	0			GRID	2008	5	-141.0943.076	-845	0		
GRID	1108	0	-139.738-404.997.150	0			GRID	2010	5	-100.7503.353	-1.150	0			
GRID	1109	0	-128.703-404.537.167	0			GRID	2012	5	-75.750	3.524	-1.410			
GRID	1110	0	-108.954-403.714.198	0			GRID	2014	5	-40.750	3.763	-1.765			
GRID	1111	0	-83.248	-402.642.238	0			GRID	2016	5	0.000	4.054	-2.190		
GRID	1112	0	-53.000	-401.381.285	0			GRID	2018	5	14.758	4.143	-2.080		
GRID	1113	0	-41.500	-400.902.925	0			GRID	2019	0	-180.000-381.378.-790	0			
GRID	1114	0	-41.500	-417.4009.000	0			GRID	2020	0	-168.385-374.169.-965	1			
GRID	1121	0	-41.500	-373.8005.850	0			GRID	2021	0	-157.000-366.154-1.156	0			
GRID	1125	0	-120.235-395.153.514	0			GRID	2022	0	-147.640-359.565-1.284	0				
GRID	1126	0	-100.719-392.843.669	0			GRID	2023	0	-143.035-356.324-1.358	1				
GRID	1127	0	-69.427	-389.140.737	0			GRID	2024	0	-139.738-354.003-1.400	0			
GRID	1128	0	-119.530-399.653.348	0			GRID	2025	0	-122.591-341.932-1.635	1				
GRID	1129	0	-99.898	-398.082.406	0			GRID	2026	0	-120.000-340.108-1.663	0			
GRID	1130	0	-68.420	-395.564.500	0			GRID	2027	0	-93.970	-321.785-2.016	1		
GRID	1131	0	-118.830-404.125.182	0			GRID	2029	0	-86.000	-316.174-2.124	0			
GRID	1132	0	-99.081	-403.302.213	0			GRID	2030	0	-60.647	-298.327-2.534	1		
GRID	1133	0	-67.414	-401.982.263	0			GRID	2031	0	-41.500	-293.800-4.750	0		
GRID	1134	0	-139.738-394.695.531	7			GRID	2032	0	-54.216	-293.800-2.600	0			
GRID	1135	0	-130.473-393.243.585	7			GRID	2033	0	-41.500	-293.800-3.209	0			
GRID	1136	0	-120.773-393.723.641	7			GRID	2034	0	-25.500	-293.800-9.850	0			
GRID	1137	0	-111.071-390.203.697	7			GRID	2037	0	-41.500	-308.500-5.350	0			
GRID	1138	0	-101.371-388.683.754	7			GRID	2038	0	-54.216	-310.784-2.852	0			
GRID	1139	0	-85.817	-386.246.844	7			GRID	2039	0	-41.500	-308.500-3.166	0		
GRID	1140	0	-70.262	-383.809.934	7			GRID	2040	0	-25.500	-308.500-10.350	0		
GRID	1141	0	-53.000	-381.1041.050	7			GRID	2044	0	-86.000	-332.494-2.350	0		
GRID	1142	0	-41.500	-379.3023.412	7			GRID	2045	0	-41.500	-324.500-5.450	0		
GRID	1143	0	-180.000-389.378.675	0			GRID	2046	0	-54.216	-326.784-2.750	0			
GRID	1173	5	-116.25010.466	-453	0			GRID	2047	0	41.500	-324.500-2.944	0		
GRID	1174	5	-88.250	12.029	-640	0			GRID	2048	0	-25.500	-324.500-10.350	0	
GRID	1175	5	-58.250	13.701	-795	0			GRID	2051	0	-139.738-358.146-1.446	0		
GRID	1176	5	-19.500	15.863	-1.015	0			GRID	2052	0	-120.000-354.601-1.763	0		
GRID	1177	5	-116.2503.247	990	0			GRID	2053	0	-86.000	-348.494-2.112	0		
GRID	1178	5	-88.250	3.438	-1.303	0			GRID	2054	0	-41.500	-340.500-5.450	0	
GRID	1179	5	-58.250	3.643	-1.590	0			GRID	2055	0	-54.216	-342.784-2.426	0	
GRID	1180	5	-19.500	3.908	-1.980	0			GRID	2056	0	-41.500	-340.500-2.598	0	
GRID	1181	0	-71.000	-305.6152.359	0				GRID	2057	0	-25.500	-340.500-10.750	0	
GRID	1182	0	-71.000	-313.7992.486	0				GRID	2060	0	-168.385-379.292.-984	0		
GRID	1183	0	-71.000	-329.7992.524	0				GRID	2061	0	-157.000-377.247-1.108	0		
GRID	1184	0	-71.000	-345.7992.242	0				GRID	2062	0	-139.738-374.146-1.256	0		
GRID	1185	0	-71.000	-361.7991.776	0				GRID	2063	0	-131.000-372.576-1.328	0		
GRID	1186	0	-71.000	-379.0991.138	7				GRID	2064	0	-120.000-370.601-1.418	0		
GRID	1187	0	-102.000-327.4371.904	0					GRID	2065	0	-86.000	-364.494-1.676	0	
GRID	1188	0	-102.000-335.3672.032	0					GRID	2066	0	41.500	-356.500-5.800	0	
GRID	1189	0	-102.000-351.3671.954	0					GRID	2067	0	-54.216	-358.784-1.908	0	
GRID	1190	0	-102.000-367.3671.559	0					GRID	2068	0	-41.500	-356.500-2.028	0	
GRID	1191	0	-102.000-384.667.924	7					GRID	2069	0	-25.500	-356.500-10.950	0	
GRID	1192	0	-131.000-347.8521.517	0					GRID	2072	0	-180.000-398.678.-330	0		
GRID	1193	0	-131.000-356.5761.617	0					GRID	2073	0	-168.385-396.592-415	0		
GRID	1194	5	-131.7503.141	-875	0					GRID	2074	0	-157.000-394.547-508	0	
GRID	1233	0	-41.500	-497.5002.790	0										

GRID	2106	0	-53.000 -394.330-.545	0		GRID	3022	0	-182.88 -400.6450.	0
GRID	2107	0	-41.500 -393.410-1.787	0		GRID	3500	0	-120. -335.09 -25.	
GRID	2108	0	-139.738-404.997-.150	0		GRID	3501	0	-120. -346.07 -11.20	
GRID	2109	0	-128.703-404.537-.167	0		MAT1	1	10.5E6 5.5E6		
GRID	2110	0	-108.954-403.714-.198	0		MAT1	2	10.5E6 4.0E6		
GRID	2111	0	-83.248 -402.642-.238	0		MAT1	3	.999998B,.999998E		
GRID	2112	0	-53.000 -401.381-.285	0		MAT1	4	10.5E6 .999998B		
GRID	2113	0	-41.500 -400.902-.925	0		MAT1	5	10.5E6 4.400E6		
GRID	2114	0	-41.500 -417.400-9.000	0		MAT1	601	3.150E6 4.400E6		
GRID	2121	0	-41.500 -373.800-5.850	0		MAT1	606	6.825E6 4.400E6		
GRID	2125	0	-120.235-395.153-.514	0		MAT2	701	8681000.2159000. -78300. 7164000. -78300. 2558000.		
GRID	2126	0	-100.719-392.843-.669	0		MAT2	702	7047000.2537000. -160600.8488000. -160600.2700000.		
GRID	2127	0	-69.427 -389.140-.737	0		MAT2	703	6618000.2464000. -254500.8980000. -254500.2625000.		
GRID	2128	0	-119.530-399.653-.348	0		MAT2	704	6501000.2411000. -94900. 9416000. -94900. 2500000.		
GRID	2129	0	-99.898 -398.082-.406	0		MAT2	705	6047000.2622000. -109000.9502000. -109000.2783000.		
GRID	2130	0	-68.420 -395.564-.500	0		MAT2	706	7849000.2569000. -130600.7900000. -130600.2733000.		
GRID	2131	0	-118.810-404.125-.182	0		MAT2	707	7849000.2569000. -130000.7902000. -130000.2600000.		
GRID	2132	0	-99.081 -403.302-.213	0		MAT2	708	6516000.2481000. -178900.9219000. -178900.2700000.		
GRID	2133	0	-67.414 -401.982-.263	0		MAT2	709	6299000.2424000. -149500.9651000. -149500.2700000.		
GRID	2134	0	-139.738-394.695-.531	7		MAT2	710	6427000.2319000. -413300.9734000. -413300.2800000.		
GRID	2135	0	-130.473-393.243-.585	7		PARAM	GROPN1	0		
GRID	2136	0	-120.773-391.723-.641	7		PARAM	WTMASS	0.00258		
GRID	2137	0	-111.071-390.203-.697	7		PBAR	27	2 100. 9999. 9999. 9999.		+2401
GRID	2138	0	-101.371-388.683-.754	7		PBAR	2401	2 100.0 100.0 .00001 .001		+2401A
GRID	2139	0	-85.817 -386.246-.84	7		+2401				
GRID	2140	0	-70.262 -383.809-.934	7		PBAR	2401	1. .0000001		
GRID	2141	0	-53.000 -381.104-1.050	7		+2402				
GRID	2142	0	-41.500 -379.302-3.412	7		PBAR	2402	2 100. 100. 100.0 .00001 .001		+2402A
GRID	2143	0	-180.000-389.378-.675	0		+2402				
GRID	2173	5	-116.25010.466 -.453	0		PBAR	2403	2 100. 100. 100.0 .00001 .001		+2403
GRID	2174	5	-88.250 12.029 -.640	0		+2403				
GRID	2175	5	-58.250 13.701 -.795	0		PBAR	2403A	1. .0000001		
GRID	2176	5	-19.500 15.863 -1.015	0		+2404				
GRID	2177	5	-116.2503.247 -.990	0		PBAR	2404	2 100. 100. 100.0 .00001 .001		+2404A
GRID	2178	5	-88.250 3.438 -.1303	0		+2404				
GRID	2179	5	-58.250 3.643 -.1590	0		PBAR	2405	2 100. 100. 100.0 .00001 .001		+2405
GRID	2180	5	-19.500 3.908 -.1980	0		+2405				
GRID	2181	0	-71.000 -305.615-2.359	0		PBAR	2406	2 100. 100. 100.0 .00001 .001		+2406
GRID	2182	0	-71.000 -313.799-2.486	0		+2406				
GRID	2183	0	-71.000 -329.799-2.524	0		PBAR	2406A	1. .0000001		
GRID	2184	0	-71.000 -345.799-2.242	0		PBAR	2407	2 100. 100. 100.0 .00001 .001		+2407
GRID	2185	0	-71.000 -361.799-1.176	0		+2407				
GRID	2186	0	-71.000 -379.099-1.138	7		PBAR	2407A	1. .0000001		
GRID	2187	0	-102.000-327.437-1.904	0		PBAR	2408	2 100. 100. 100.0 .00001 .001		+2408
GRID	2188	0	-102.000-335.367-2.032	0		+2408				
GRID	2189	0	-102.000-351.367-1.954	0		PBAR	2408A	1. .0000001		
GRID	2190	0	-102.000-367.367-1.559	0		PBAR	2409	2 100. 100. 100.0 .00001 .001		+2409
GRID	2191	0	-102.000-384.667-1.924	7		+2409				
GRID	2192	0	-131.000-347.852-1.517	0		PBAR	2410	2 100. 100. 100.0 .00001 .001		+2410
GRID	2193	0	-131.000-356.576-1.617	0		+2410				
GRID	2194	5	-131.7503.141 -.675	0		PBAR	2410A	1. .0000001		+2410A
GRID	2233	0	-41.500 -497.500-2.790	0		PBAR	2411	2 100. 100. 100.0 .00001 .001		+2411
GRID	2242	0	-168.385-387.292-.764	0		+2411				
GRID	2243	0	-157.000-385.247-.862	0		PBAR	2411A	1. .0000001		+2411A
GRID	2244	0	-139.738-382.146-1.004	0		+2412				
GRID	2245	0	-131.000-380.576-1.080	0		PBAR	2412	2 100. 100. 100.0 .00001 .001		+2412
GRID	2251	0	-41.500 -463.052-1.021	0		+2412A				
GRID	2252	0	-67.903 -492.973-.716	0		PBAR	2412A	1. .0000001		+2412A
GRID	2253	0	-81.403 -493.159-.560	0		PBAR	2413	2 100. 100. 100.0 .00001 .001		+2413
GRID	2254	0	-92.653 -501.646-.430	0		+2413				
GRID	2255	0	-103.085-509.517-.309	0		PBAR	2413A	1. .0000001		+2413A
GRID	2256	0	-110.127-514.810-.228	0		+2414				
GRID	2257	0	-57.952 -504.942-2.503	0		PBAR	2414	2 100. 100. 100.0 .00001 .001		+2414
GRID	2258	0	-72.299 -513.261-1.801	0		+2414A				
GRID	2259	0	-84.253 -520.193-1.437	0		PBAR	2415	2 100. 100. 100.0 .00001 .001		+2415
GRID	2260	0	-95.338 -526.621-1.091	0		+2415				
GRID	2261	0	-110.127-535.197-.606	0		PBAR	2415A	1. .0000001		+2415A
GRID	2262	0	-41.500 -541.265-.833	0		PBAR	2416	2 100. 100. 100.0 .00001 .001		+2416
GRID	2263	0	-59.060 -542.488-.670	0		+2416				
GRID	2264	0	-73.693 -543.508-.531	0		PBAR	2416A	1. .0000001		+2416A
GRID	2265	0	-87.261 -544.453-.399	0		+2417				
GRID	2266	0	-102.862-545.540-2.48	0		PBAR	2417	2 100. 100. 100.0 .00001 .001		+2417A
GRID	2275	0	-40.750 -479.550-5.000	0		+2417A				
GRID	2276	0	-29.250 -479.550-6.150	0		PBAR	2418	2 100. 100. 100.0 .00001 .001		+2418
GRID	2280	0	-40.750 -462.820-5.500	0		+2418				
GRID	2290	0	-29.250 -462.820-7.000	0		PBAR	2418A	1. .0000001		+2418A
GRID	2292	0	-40.750 -446.100-5.650	0		PBAR	2419	2 100. 100. 100.0 .00001 .001		+2419
GRID	2293	0	-29.250 -446.100-7.000	0		+2419				
GRID	2294	0	-29.250 -492.500-4.500	0		PBAR	2420	2 100. 100. 100.0 .00001 .001		+2420
GRID	2465	0	-40.750 -492.500-4.750	0		+2420				
GRID	2466	0	-29.250 -502.250-3.000	0		PBAR	2420A	1. .0000001		+2420A
GRID	2467	0	-40.750 -502.250-4.250	0		PBAR	2421	2 100. 100. 100.0 .00001 .001		+2421
GRID	2501	0	-54.702 -473.013-0.868	0		+2421				
GRID	2502	0	-74.653 -488.066-0.638	0		PBAR	2421A	1. .0000001		+2421A
GRID	2503	0	-87.028 -497.402-0.495	0		+2422				
GRID	2504	0	-97.869 -505.582-0.370	0		PBAR	2422	2 100. 100. 100.0 .00001 .001		+2422
GRID	2505	0	-106.806-512.174-0.268	0		+2422				
GRID	2506	0	-41.5 -480.276-1.906	0		PBAR	2422A	1. .0000001		+2422A
GRID	2507	0	-62.928 -493.958-1.610	0		+2422A				
GRID	2508	0	-76.851 -503.210-1.180	0		PBAR	2423	2 100. 100. 100.0 .00001 .001		+2423
GRID	2509	0	-89.453 -510.920-0.934	0		+2423				
GRID	2510	0	-99.212 -518.069-0.700	0		PBAR	2424	2 100. 100. 100.0 .00001 .001		+2424
GRID	2511	0	-110.127-525.014-0.417	0		+2424				
GRID	2512	0	-49.726 -501.221-2.646	0		PBAR	2424A	1. .0000001		+2424A
GRID	2513	0	-65.126 -509.102-2.152	0		+2424A				
GRID	2514	0	-78.276 -516.727-1.619	0		PBAR	2425	2 100. 100. 100.0 .00001 .001		+2425
GRID	2515	0	-89.796 -523.407-1.264	0		+2425				
GRID	2516	0	-102.733-530.909-0.848	0		PBAR	2425A	1. .0000001		+2425A
GRID	2517	0	-41.5 -519.383-1.812	0		+2425A				
GRID	2518	0	-49.726 -523.104-1.668	0		PBAR	2426	2 100. 100. 100.0 .00001 .001		+2426
GRID	2519	0	-65.680 -527.875-1.236	0		+2426				
GRID	2520	0	-78.973 -531.805-0.984	0		PBAR	2427	2 100. 100. 100.0 .00001 .001		+2427
GRID	2521	0	-91.3 -535.537-0.745	0		+2427				
GRID	2522	0	-106.495-540.368-0.427	0		PBAR	2427A	1. .0000001		+2427A
GRID	2523	0	-50.20 -541.876-0.752	0		+2427A				
GRID	2524	0	-66.376 -542.998-0.600	0		PBAR	2428	2 100. 100. 100.0 .00001 .001		+2428
GRID	2525	0	-80.477 -544.008-0.465	0		+2428				
GRID	2526	0	-95.062 -544.996-0.324	0		PBAR	2429	2 100. 100		

+2431						+2431A	PBEAM	9	2	1980.0009400.0003900.000	5250.	+9
+2431A	1.	.0000001				+2432	+9	NO	1.0	9400.0003887.062		+9A
PBAR	2432	2	100.0	100.0	.00001	.001	+2432A	+9A	0.	1.		
+2432						+2432A	PBEAM	10	2	1980.0009400.0003887.062	5250.	+10
+2432A	1.	.0000001				+2433	+10	NO	1.0	10100.003670.000		+10A
PBAR	2433	2	100.0	100.0	.00001	.001	+2433A	+10A	0.	1.		
+2433						+2433A	PBEAM	11	2	1980.00010100.003670.000	5250.	+11
+2433A	1.	.0000001				+2434	+11	NO	1.0	1000.0003691.000		+11A
PBAR	2434	2	100.0	100.0	.00001	.001	+2434A	+11A	0.	1.		
+2434						+2434A	PBEAM	12	2	1980.0001000.0003691.000	5250.	+12
+2434A	1.	.0000001				+2435	+12	NO	1.0	9600.0003700.000		+12A
PBAR	2435	2	100.0	100.0	.00001	.001	+2435A	+12A	0.	1.		
+2435						+2435A	PBEAM	13	2	1980.0009600.0003700.000	5250.	+13
+2435A	1.	.0000001				+2436	+13	NO	1.0	8750.0003780.000		+13A
PBAR	2436	2	100.0	100.0	.00001	.001	+2436A	+13A	0.	1.		
+2436						+2436A	PBEAM	14	2	1980.0008750.0003780.000	5250.	+14
+2436A	1.	.0000001				+2437	+14	NO	1.0	8123.6303590.000		+14A
PBAR	2437	2	100.0	100.0	.00001	.001	+2437A	+14A	0.	1.		
+2437						+2437A	PBEAM	15	2	1980.0008123.6303590.000	5250.	+15
+2437A	1.	.0000001				+2438	+15	NO	1.0	7200.0003340.000		+15A
PBAR	2438	2	100.0	100.0	.00001	.001	+2438A	+15A	0.	1.		
+2438						+2438A	PBEAM	16	2	1980.0007200.0003340.000	5067.5	+16
+2438A	1.	.0000001				+2439	+16	NO	1.0	6425.0001972.000		+16A
PBAR	2439	2	100.0	100.0	.00001	.001	+2439A	+16A	0.	1.		
+2439						+2439A	PBEAM	17	2	1980.0006425.0 1872.00	4910.0	+17
+2439A	1.	.0000001				+2440	+17	NO	1.0	1980.0006375.0 1791.00		+17A
PBAR	2440	2	100.0	100.0	.00001	.001	+2440A	+17A	0.	1.		
+2440						+2440A	PBEAM	18	2	1980.0006375.0 1791.00	4725.0	+18
+2440A	1.	.0000001				+2441	+18	NO	1.0	1980.0006200.0 1470.00		+18A
PBAR	2441	2	100.0	100.0	.00001	.001	+2441A	+18A	0.	1.		
+2441						+2441A	PBEAM	19	2	1980.0006200.0 1470.00	4515.0	+19
+2441A	1.	.0000001				+2442	+19	NO	1.0	1980.0006900.0 1374.00		+19A
PBAR	2442	2	100.0	100.0	.00001	.001	+2442A	+19A	0.	1.		
+2442						+2442A	PBEAM	20	2	1980.0006900.0 1374.00	4375.5	+20
+2442A	1.	.0000001				+2443	+20	NO	1.0	1980.0008250.0 1167.00		+20A
PBAR	2443	2	100.0	100.0	.00001	.001	+2443A	+20A	0.	1.		
+2443						+2443A	PBEAM	21	2	1980.0008250.0 1167.00	4147.5	+21
+2443A	1.	.0000001				+2444	+21	NO	1.0	1980.0008250.0 960.00		+21A
PBAR	2444	2	100.0	100.0	.00001	.001	+2444A	+21A	0.	1.		
+2444						+2444A	PBEAM	22	2	1. 8250.0009600.000	3885.	+22
+2444A	1.	.0000001				+2445	+22	NO	1.0	8250.0000000.		+22A
PBAR	2445	2	100.0	100.0	.00001	.001	+2445A	+22A	0.	1.		
+2445						+2445A	PBEAM	31	2	200.000 9999.0 99999.00	.01	+31
+2445A	1.	.0000001				+2446	+31	NO	1.0	197.000		+32
PBAR	2446	2	100.0	100.0	.00001	.001	+2446A	+32	NO	1.0	200.000	
+2446						+2446A	PBEAM	33	2	200.000 9999.0 99999.00	.01	+33
+2446A	1.	.0000001				+2447	+33	NO	1.0	207.000		+34
PBAR	2447	2	100.0	100.0	.00001	.001	+2447A	+34	NO	1.0	200.000 9999.0 99999.00	.01
+2447						+2447A	PBEAM	35	2	215.000		
+2447A	1.	.0000001				+2448	+35	NO	1.0	200.000 9999.0 99999.00	.01	+35
PBAR	2448	2	100.0	100.0	.00001	.001	+2448A	+36	NO	1.0	219.000	
+2448						+2448A	PBEAM	36	2	200.000 9999.0 99999.00	.01	+36
+2448A	1.	.0000001				+2449	+36	NO	1.0	222.000		+37
PBAR	2449	2	100.0	100.0	.00001	.001	+2449A	+37	NO	1.0	1980.0009999.0 99999.00	.01
+2449						+2449A	PBEAM	37	2	1980.0009999.0 99999.00	.01	+37
+2449A	1.	.0000001				+2450	+38	NO	1.0	1188.000		+38
PBAR	2450	2	100.0	100.0	.00001	.001	+2450A	+38	NO	1.0	197.000	
+2450						+2450A	PBEAM	39	2	200.000 9999.0 99999.00	.01	+39
+2450A	1.	.0000001				+2451	+39	NO	1.0	197.000		+40
PBAR	2451	2	100.0	100.0	.00001	.001	+2451A	+39	NO	1.0	200.000	
+2451						+2451A	PBEAM	40	2	200.000 9999.0 99999.00	.01	+40
+2451A	1.	.0000001				+2452	+40	NO	1.0	2180.000		+41
PBAR	2452	2	100.0	100.0	.00001	.001	+2452A	+41	NO	1.0	2180.000	
+2452						+2452A	PBEAM	42	2	5.590 9999.0 376.00		+42
+2452A	1.	.0000001				+2453	+41	NO	1.0	2.834 9999.0 379.30		+43
PBAR	2453	2	100.0	100.0	.00001	.001	+2453A	+42	NO	1.0	3.942 9999.0 215.00	
+2453						+2453A	PBEAM	43	2	4.140 9999.0 215.00		+44
+2453A	1.	.0000001				+2454	+43	NO	1.0	2.140 9999.0 230.75		+45
PBAR	2454	2	100.0	100.0	.00001	.001	+2454A	+43	NO	1.0	2.140 9999.0 230.75	
+2454						+2454A	PBEAM	44	2	2.140 9999.0 230.75		+46
+2454A	1.	.0000001				+2455	+44	NO	1.0	2.140 9999.0 230.75		+47
PBAR	2455	2	100.0	100.0	.00001	.001	+2455A	+44	NO	1.0	2.140 9999.0 230.75	
+2455						+2455A	PBEAM	45	2	2.140 9999.0 230.75		+48
+2455A	1.	.0000001				+2456	+45	NO	1.0	2.140 9999.0 230.75		+49
PBAR	2456	2	100.0	100.0	.00001	.001	+2456A	+45	NO	1.0	2.140 9999.0 230.75	
+2456						+2456A	PBEAM	46	2	2.140 9999.0 230.75		+50
+2456A	1.	.0000001				+2457	+46	NO	1.0	2.140 9999.0 230.75		+50A
PBAR	2457	2	100.0	100.0	.00001	.001	+2457A	+46	NO	1.0	2.140 9999.0 230.75	
+2457						+2457A	PBEAM	47	2	2.140 9999.0 230.75		+51
+2457A	1.	.0000001				+2458	+47	NO	1.0	2.140 9999.0 230.75		+52
PBAR	2458	2	100.0	100.0	.00001	.001	+2458A	+47	NO	1.0	2.140 9999.0 230.75	
+2458						+2458A	PBEAM	48	2	2.140 9999.0 230.75		+53
+2458A	1.	.0000001				+2459	+48	NO	1.0	2.140 9999.0 230.75		+54
PBAR	2459	2	100.0	100.0	.00001	.001	+2459A	+48	NO	1.0	2.140 9999.0 230.75	
+2459						+2459A	PBEAM	49	2	2.140 9999.0 230.75		+55
+2459A	1.	.0000001				+2460	+49	NO	1.0	2.140 9999.0 230.75		+56
PBAR	2460	2	100.0	100.0	.00001	.001	+2460A	+49	NO	1.0	2.140 9999.0 230.75	
+2460						+2460A	PBEAM	50	2	1.354 1. 51.57		+57
+2460A	1.	.0000001				+2461	+50	NO	1.0	1.371 1. 53.59		+58
PBAR	2461	2	10000.	99990.	99990.	99990.	+2461A	+50A	0.	1.	-0.0185	
+2461						+2461A	PBEAM	51	2	1.371 1. 53.59		+59
+2461A	1.	.0000001				+2462	+51	NO	1.0	1.371 1. 53.59		+59A
PBAR	2462	2	.690	480.000	371.450	.001	+2462A	+51A	0.	1.	-0.0086	
+2462						+2462A	PBEAM	52	2	1.371 1. 53.59		+59A
+2462A	1.	.0000001				+2463	+52	NO	1.0	1.371 1. 53.59		+60
PBAR	2463	2	1.0	593.000	547.400		+2463A	+52A	0.	1.	-0.0086	
+2463						+2463A	PBEAM	53	2	1.371 1. 53.59		+60A
+2463A	1.	.0000001				+2464	+53	NO	1.0	1.371 1. 53.59		+61
PBAR	2464	2	1.0	593.000	547.400	.001	+2464A	+53A	0.	1.	-0.0086	
+2464						+2464A	PBEAM	54	2	1.371 1. 53.59		+61A
+2464A	1.	.0000001				+2465	+54	NO	1.0	1.371 1. 53.59		+62
PBAR	2465	2	1.0	736.000	606.050		+2465A	+54A	0.	1.	-0.0086	
+2465						+2465A	PBEAM	55	2	1.371 1. 53.59		+63
+2465A	1.	.0000001				+2466	+55	NO	1.0	1.371 1. 53.59		+64
PBAR	2466	2	1.0	912.000	656.500		+2466A	+55A	0.	1.	-0.0086	
+2466						+2466A	PBEAM	56	2	1.371 1. 53.59		+65
+2466A	1.	.0000001				+2467	+56	NO	1.0	1.371 1. 53.59		+66
PBAR	2467	2	1.0	3104.000	1780.000		+2467A	+56A	0.	1.	-0.0086	
+2467						+2467A	PBEAM	57	2	1.371 1. 53.59		+67
+2467A	1.	.0000001				+2468	+57	NO	1.0	1.371 1. 53.59		+68
PBAR	2468	2	1.0	6240.000	3625.000		+2468A	+57A	0.	1.	-0.0086	
+2468						+2468A	PBEAM	58	2	1.371 1. 53.59		+69
+2468A	1.	.0000001				+2469	+58	NO	1.0	1.371 1. 53.59		+70
PBAR	2469	2	1.0	3.600	8000.0004245.000		+2469A	+58A	0.	1.	-0.0086	
+246												

PBEAM	144	2	2.800	1.	61.49	.001	+144	+1007	NO	1.	0.5704	4.188	+1007A	
+144	NO	1.0	3.080	1.	76.54		+144A	+1007A	O.	1.	-9.23-2		+1009	
+144A	O.	1.			-.0952			PBEAM	1009	2	0.05068	1.	7.4	
PBEAM	145	2	3.080	1.	76.54	.001	+145	+1009	NO	1.	0.05704		+1009A	
+145	NO	1.0	3.080		-.0000		+145A	+1009A	O.	1.	-.118			
+145A	O.	1.						PBEAM	1010	2	0.68448	1.	11.387	+1010
PBEAM	146	2	.990	1.	44.68	.001	+146	+1010	NO	1.	0.65988	10.584	+1010A	
+146	NO	1.0	1.017		47.44		+146A	+1010A	O.	1.	3.66-2			
+146A	O.	1.			-.0269			PBEAM	1011	2	0.65988	1.	3.834	+1011
PBEAM	147	2	1.017	1.	34.25	.001	+147	+1011	NO	1.	0.58224	3.781	+1011A	
+147	NO	1.0	1.620		103.19		+147A	+1011A	O.	1.	.125			
+147A	O.	1.			-.4573			PBEAM	1012	2	0.4852	1.	2.985	+1012
PBEAM	148	2	1.500	1.	24.08	.001	+148	+1012	NO	1.	0.3817	3.085	+1012A	
+148	NO	1.0	1.875		39.37		+148A	+1012A	O.	1.	.239			
+148A	O.	1.			-.2222			PBEAM	1013	2	0.3817	1.	4.113	+1013
PBEAM	149	2	1.875	1.	39.37	.001	+149	+1013	NO	1.	0.2527	3.779	+1013A	
+149	NO	1.0	2.250		59.52		+149A	+1013A	O.	1.	.407			
+149A	O.	1.			-.1818			PBEAM	1014	2	1.1795	1.	32.608	+1014
PBEAM	150	2	1.125	1.	44.13	.001	+150	+1014	NO	1.	1.24325	37.764	+1014A	
+150	NO	1.0	1.538		87.37		+150A	+1014A	O.	1.	-.526-2			
+150A	O.	1.			-.3099			PBEAM	1015	2	1.24325	1.	35.291	+1015
PBEAM	151	2	1.538	1.	86.52	.001	+151	+1015	NO	1.	1.26225	36.787	+1015A	
+151	NO	1.0	1.750		115.17		+151A	+1015A	O.	1.	-.152-2			
+151A	O.	1.			-.1293			PBEAM	1016	2	1.0098	1.	36.787	+1016
PBEAM	152	2	1.750	1.	115.17	.001	+152	+1016	NO	1.	0.897	28.514	+1016A	
+152	NO	1.0	1.750		115.17		+152A	+1016A	O.	1.	.118			
+152A	O.	1.			.0000			PBEAM	1017	2	0.897	1.	28.514	+1017
PBEAM	153	2	14.000	1.	129.80	.001	+153	+1017	NO	1.	0.7106	17.378	+1017A	
+153	NO	1.0	14.000		129.80		+153A	+1017A	O.	1.	.232			
+153A	O.	1.			.0000			PBEAM	1018	2	0.88825	1.	17.378	+1018
PBEAM	154	2	14.000	1.	79.18	.001	+154	+1018	NO	1.	0.569	7.448	+1018A	
+154	NO	1.0	18.000		130.90		+154A	+1018A	O.	1.	.438			
+154A	O.	1.			-.2500			PBEAM	1020	2	.174168	1.	2.924	+1020
PBEAM	160	2	30.000	.001	.001	.001	+160	+1020	NO	1.	.192741	3.774	+1020A	
+160	NO	1.0	30.000				+160A	+1020A	O.	1.	-.101			
+160A	O.	1.			.0000			PBEAM	1022	2	.004037	1.	8.0	+1022
PBEAM	161	2	1980.0001.		9999.00	.001	+161	+1022	NO	1.	.004701	3.	+1022A	
+161	NO	1.0	2970.000		9999.00		+161A	+1022A	O.	1.	-.152			
+161A	O.	1.			.0000			PBEAM	1023	2	.192741	1.	3.774	+1023
PBEAM	162	2	2970.0001.		9999.00	.001	+162	+1023	NO	1.	.173225	1.931	+1023A	
+162	NO	1.0	1782.000		47.10		+162A	+1023A	O.	1.	.107			
+162A	O.	1.			.0000			PBEAM	1024	2	.173225	1.	1.931	+1024
PBEAM	163	2	1.080	1.	121.33	.001	+163	+1024	NO	1.	.137473	.991	+1024A	
+163	NO	1.0	1.080		99.73		+163A	+1024A	O.	1.	.230			
+163A	O.	1.			.0000			PBEAM	1025	2	.137473	1.	.991	+1025
PBEAM	164	2	1980.0001.		9999.00	.001	+164	+1025	NO	1.	.085198	4.751	+1025A	
+164	NO	1.0	2970.000		9999.00		+164A	+1025A	O.	1.	.470			
+164A	O.	1.			.0000			PBEAM	1026	2	0.53326	1.	4.915	+1026
PBEAM	165	2	2970.0001.		9999.00	.001	+165	+1026	NO	1.	0.56896	4.995	+1026A	
+165	NO	1.0	1980.000		9999.00		+165A	+1026A	O.	1.	-.648-2			
+165A	O.	1.			.0000			PBEAM	1027	2	0.97536	1.	4.995	+1027
PBEAM	166	2	.840	1.	181.16	.001	+166	+1027	NO	1.	.93792	4.858	+1027A	
+166	NO	1.0	.678		115.24		+166A	+1027A	O.	1.	3.91-2			
+166A	O.	1.			.2134			PBEAM	1028	2	0.54712	1.	4.858	+1028
PBEAM	167	2	1980.0001.		9999.00	.001	+167	+1028	NO	1.	.043652	2.292	+1028A	
+167	NO	1.0	1980.000		9999.00		+167A	+1028A	O.	1.	.225			
+167A	O.	1.			.0000			PBEAM	1029	2	0.12472	1.	2.292	+1029
PBEAM	168	2	1.400	1.	239.03	.001	+168	+1029	NO	1.	.07392	.998	+1029A	
+168	NO	1.0	1.100		139.10		+168A	+1029A	O.	1.	.511			
+168A	O.	1.			.2400			PBEAM	1031	2	.602006	1.	12.135	+1031
PBEAM	169	2	4.200	1.	20.00	.001	+169	+1031	NO	1.	.638206	13.539	+1031A	
+169	NO	1.0	3.210		20.00		+169A	+1031A	O.	1.	-.584-2			
+169A	O.	1.			.0000			PBEAM	1033	2	0.0327	1.	.54	+1033
PBEAM	170	2	3.210	1.	20.00	.001	+170	+1033	NO	1.	0.03526	.529	+1033A	
+170	NO	1.0	3.300		20.00		+170A	+1033A	O.	1.	-.753-2			
+170A	O.	1.			.0000			PBEAM	1034	2	.461906	1.	13.539	+1034
PBEAM	168	2	1.400	1.	239.03	.001	+168	+1034	NO	1.	.371385	8.407	+1034A	
+168A	NO	1.0	1.100		139.10		+168A	+1034A	O.	1.	.217			
+168A	O.	1.			.2400			PBEAM	1035	2	0.1134	1.	.241	+1035
PBEAM	169	2	4.200	1.	20.00	.001	+169	+1035	NO	1.	.0864	.140	+1035A	
+169A	NO	1.0	3.210		20.00		+169A	+1035	O.	1.	.270			
+169A	O.	1.			.0000			PBEAM	1036	2	.371385	1.	7.726	+1036
PBEAM	173	2	1.125	1.	41.92	.001	+173	+1036	NO	1.	.208421	2.466	+1036A	
+173	NO	1.0	1.188		46.53		+173A	+1036A	O.	1.	.562			
+173A	O.	1.			-.0541			PBEAM	1037	2	0.0864	1.	.140	+1037
PBEAM	174	2	.750	1.	12.63	.001	+174	+1037	NO	1.	.06364	.0759	+1037A	
+174	NO	1.0	1.063		23.78		+174A	+1037A	O.	1.	.303			
+174A	O.	1.			-.3448			PBEAM	1038	2	0.54612	1.	5.551	+1038
PBEAM	175	2	1059.3001.		9999.00	.001	+175	+1038	NO	1.	0.58212	5.807	+1038A	
+175	NO	1.0	841.500		9999.00		+175A	+1038A	O.	1.	-.630-2			
+175A	O.	1.			.0000			PBEAM	1039	2	0.19404	1.	.4814	+1039
PBEAM	176	2	75.000	1.	2.98	.001	+176	+1039	NO	1.	.05936	2.212	+1039A	
+176	NO	1.0	79.000		12.10		+176A	+1039A	O.	1.	.196			
+176A	O.	1.			.0000			PBEAM	1040	2	0.15936	1.	2.212	+1040
PBEAM	177	2	79.000	1.	12.10	.001	+177	+1040	NO	1.	.1296	.140	+1040A	
+177	NO	1.0	82.000		29.71		+177A	+1040A	O.	1.	.206			
+177A	O.	1.			.0000			PBEAM	1041	2	.216	1.	.233	+1041
PBEAM	178	2	82.000	1.	29.71	.001	+178	+1041	NO	1.	.04111	.0995	+1041A	
+178	NO	1.0	85.000		29.71		+178A	+1041A	O.	1.	.419			
+178A	O.	1.			.0000			PBEAM	1043	2	.1148	1.	.239	+1043
PBEAM	179	2	85.000	1.	46.06	.001	+179	+1043	NO	1.	.118531	.255	+1043A	
+179	NO	1.0	90.000				+179A	+1043A	O.	1.	-.320-2			
+179A	O.	1.			.0000			PBEAM	1045	2	0.02716	1.	3.2	+1045
PBEAM	180	2	90.000	1.	46.06	.001	+180	+1045	NO	1.	0.02891	.0.119	+1045A	
+180	NO	1.0	55.800		31.90		+180A	+1045A	O.	1.	-.624-2			
+180A	O.	1.			.0000			PBEAM	1046	2	.118531	1.	.255	+1046
PBEAM	181	2	990.000	1.	9999.00	.001	+181	+1046	NO	1.	.103033	.193	+1046A	
+181	NO	1.0			.0000		+182	+1046A	O.	1.	.140			
+182	NO	1.0	990.000	1.	9999.00	.001	+182	+1047	NO	1.	0.02568	1.	+1047	
+182A	O.	1.			.0000		+182A	+1047A	O.	1.	0.02513		+1047A	
PBEAM	1001	2	1.34778	1.	14.325	.001	+1001	+1047A	O.	1.	.216-2			

+1052 NO	1.	0.22399	2.323	+1052A		+1099 NO	1.	0.50864	3.405	+1099A	
+1052A O.	1.	.250		+1053		+1099A O.	1.	.105		+1100	
PBEM 1053	2	0.22399	1.	2.323	+1053A		PBEM 1100	2	0.32368	1.	2.951
+1053 NO	1.	0.13195	.877	+1054		+1100 NO	1.	0.2702		+1100A	
+1053A O.	1.	.517		+1054A		+1100A O.	1.	.180		+1101	
PBEM 1054	2	10.15	1.	1.104	+1056		PBEM 1101	2	0.2895	1.	1.434
+1054 NO	1.	2.3	.15	+1056A		+1101 NO	1.	0.237		+1101A	
+1054A O.	1.	.1261		+1058		+1101A O.	1.	.199		+1102	
PBEM 1056	2	0.0772	1.	.112	+1058A		PBEM 1102	2	.803494	1.	19.105
+1056 NO	1.	.07868	.116	+1059		+1102 NO	1.	.756148		+1102A	
+1056A O.	1.	.-1.90-2		+1059A		+1102A O.	1.	.607-2			
PBEM 1057	2	0.07868	1.	.116	+1057		PBEM 1103	2	.868368	1.	3.7
+1057 NO	1.	0.06116	.0701	+1057A		+1103 NO	1.	.808308		+1103A	
+1057A O.	1.	.251		+1058		+1103A O.	1.	.716-2			
PBEM 1058	2	0.06116	1.	.587	+1058A		PBEM 1104	2	0.56848	1.	7.616
+1058 NO	1.	.0332	.173	+1059		+1104 NO	1.	0.53648		+1104A	
+1058A O.	1.	.593		+1060		+1104A O.	1.	.579-2		+1104A	
PBEM 1059	2	8.3	1.	.173	+1060A		PBEM 1105	2	0.535648	1.	1.985
+1059 NO	1.	1.8	.15	+1060A		+1105 NO	1.	0.49888		+1105A	
+1059A O.	1.	1.287		+1061		+1105A O.	1.	.726-2			
PBEM 1060	2	0.6004	1.	1.874	+1061A		PBEM 1106	2	0.49888	1.	2.217
+1060 NO	1.	0.513	1.073	+1062		+1106 NO	1.	0.4536		+1106A	
+1060A O.	1.	.157		+1062A		+1106A O.	1.	.951-2			
PBEM 1061	2	0.513	1.	1.073	+1063		PBEM 1107	2	0.70875	1.	2.009
+1061 NO	1.	.2508	.265	+1063A		+1107 NO	1.	.664		+1107A	
+1061A O.	1.	.687		+1064		+1107A O.	1.	.652-2			
PBEM 1062	2	6.6	1.	.249	+1064A		PBEM 1108	2	0.3984	1.	.670
+1062 NO	1.	1.5	.15	+1065		+1108 NO	1.	.37695		+1108A	
+1062A O.	1.	1.259		+1066		+1108A O.	1.	.553-2			
PBEM 1071	2	.563180	1.	30.125	+1067		PBEM 1109	2	0.37695	1.	.600
+1071 NO	1.	.456388	12.840	+1067A		+1109 NO	1.	0.3324		+1109A	
+1071A O.	1.	.209		+1068		+1109A O.	1.	.126			
PBEM 1072	2	.682631	1.	.8277	+1069		PBEM 1110	2	0.35456	1.	1.367
+1072 NO	1.	.665175	7.859	+1070		+1110 NO	1.	0.31472		+1110A	
+1072A O.	1.	2.59-2		+1071		+1110A O.	1.	.119			
PBEM 1073	2	.554312	1.	.7859	+1071A		PBEM 1111	2	0.15736	1.	.242
+1073 NO	1.	.515704	6.811	+1072		+1111 NO	1.	0.1264		+1111A	
+1073A O.	1.	7.15-2		+1073A		+1111A O.	1.	.218			
PBEM 1074	2	.58975	1.	14.868	+1074		PBEM 1112	2	0.1728	1.	.303
+1074 NO	1.	.531	6.135	+1074A		+1112 NO	1.	0.16064		+1112A	
+1074A O.	1.	.105		+1075		+1112A O.	1.	.729-2			
PBEM 1075	2	.675834	1.	32.711	+1075A		PBEM 1113	2	0.16064	1.	.222
+1075 NO	1.	.608902	25.555	+1076		+1113 NO	1.	0.13784		+1113A	
+1075A O.	1.	.104		+1076A		+1113A O.	1.	.153			
PBEM 1076	2	.74152	1.	3.66	+1077		PBEM 1114	2	0.13784	1.	.148
+1076 NO	1.	.64649	10.312	+1077A		+1114 NO	1.	0.12232		+1114A	
+1076A O.	1.	.137		+1078		+1114A O.	1.	.119			
PBEM 1077	2	0.59676	1.	12.691	+1078A		PBEM 1115	2	0.12232	1.	.117
+1077 NO	1.	.50976	2.256	+1079		+1115 NO	1.	.108		+1115A	
+1077A O.	1.	.157		+1079A		+1115A O.	1.	.124			
PBEM 1078	2	.531	1.	6.135	+1080		PBEM 1116	2	.337714	1.	19.909
+1078 NO	1.	.504625	5.541	+1080A		+1116 NO	1.	.312716		+1116A	
+1078A O.	1.	5.09-2		+1081		+1116A O.	1.	.769-2			
PBEM 1079	2	0.52481	1.	5.541	+1081A		PBEM 1117	2	0.85918	1.	3.590
+1079 NO	1.	0.49517	4.933	+1082		+1117 NO	1.	.77384		+1117A	
+1079A O.	1.	5.81-2		+1082A		+1117A O.	1.	.105			
PBEM 1080	2	0.41899	1.	4.933	+1083		PBEM 1118	2	0.54624	1.	6.20
+1080 NO	1.	.36586	6.161	+1083A		+1118 NO	1.	0.49872		+1118A	
+1080A O.	1.	.135		+1084		+1118A O.	1.	.9.10-2			
PBEM 1081	2	.902630	1.	30.774	+1084A		PBEM 1119	2	0.39482	1.	1.371
+1081 NO	1.	.842997	31.687	+1085		+1119 NO	1.	0.35112		+1119A	
+1081A O.	1.	6.83-2		+1085A		+1119A O.	1.	.117			
PBEM 1082	2	.756112	1.	9.525	+1086		PBEM 1120	2	0.31416	1.	.1796
+1082 NO	1.	.694238	19.190	+1086A		+1120 NO	1.	.27047		+1120A	
+1082A O.	1.	8.53-2		+1087		+1120A O.	1.	.149			
PBEM 1083	2	0.90882	1.	14.949	+1087A		PBEM 1121	2	0.36593	1.	.570
+1083 NO	1.	.84618	2.210	+1088		+1121 NO	1.	0.32453		+1121A	
+1083A O.	1.	7.14-2		+1088A		+1121A O.	1.	.120			
PBEM 1084	2	0.9402	1.	2.762	+1089		PBEM 1122	2	0.23987	1.	.388
+1084 NO	1.	.8128	2.065	+1089A		+1122 NO	1.	.21293		+1122A	
+1084A O.	1.	.145		+1090		+1122A O.	1.	.8.96-2			
PBEM 1085	2	0.48768	1.	.242	+1090A		PBEM 1123	2	2.193	1.	.0577
+1085 NO	1.	.39912	.251	+1090A		+1123 NO	1.	.1.7255		+1123A	
+1085A O.	1.	.200		+1091		+1123A O.	1.	.239			
PBEM 1086	2	0.73172	1.	4.425	+1091A		PBEM 1124	2	1.7255	1.	.0.319
+1086 NO	1.	.7194	4.277	+1091A		+1124 NO	1.	1.411		+1124A	
+1086A O.	1.	1.70-2		+1092		+1124A O.	1.	.201			
PBEM 1087	2	.7194	1.	4.277	+1092A		PBEM 1125	2	1.411	1.	.0.186
+1087 NO	1.	.667748	3.692	+1092A		+1125 NO	1.	.1.122		+1125A	
+1087A O.	1.	7.49-2		+1093		+1125A O.	1.	.228			
PBEM 1088	2	0.48544	1.	3.682	+1093A		PBEM 1126	2	0.290	1.	.15
+1088 NO	1.	.4448	3.136	+1093A		+1126 NO	1.	.0.230		+1126A	
+1088A O.	1.	8.02-2		+1094		+1126A O.	1.	.231			
PBEM 1089	2	.616	1.	3.136	+1094A		PBEM 1127	2	0.230	1.	.15
+1089 NO	1.	.59752	2.951	+1094A		+1127 NO	1.	.0.180		+1127A	
+1089A O.	1.	3.05-2		+1095		+1127A O.	1.	.244			
PBEM 1090	2	0.59752	1.	3.319	+1095A		PBEM 1128	2	0.180	1.	.15
+1090 NO	1.	.56496	2.968	+1095A		+1128 NO	1.	.0.150		+1128A	
+1090A O.	1.	5.60-2		+1096		+1128A O.	1.	.182			
PBEM 1091	2	.964044	1.	26.163	+1096A		PBEM 1131	2	24.900	1.	2.334
+1091 NO	1.	.900046	33.946	+1096A		+1131 NO	1.	.0.41600		+1131A	
+1091A O.	1.	6.87-2		+1097		+1131A O.	1.	.502			
PBEM 1092	2	.80058	1.	8.240	+1097A		PBEM 1132	2	22.300	1.	.1.258
+1092 NO	1.	.740025	7.040	+1097A		+1132 NO	1.	.0.43800		+1132A	
+1092A O.	1.	7.86-2		+1098		+1132A O.	1.	.651			
PBEM 1093	2	0.9867	1.	3.017	+1098A		PBEM 1133	2	43.800	1.	.6.091
+1093 NO	1.	.9295	2.678	+1098A		+1133 NO	1.	.0.46400		+1133A	
+1093A O.	1.	.103		+1099		+1133A O.	1.	.058			
PBEM 1094	2	0.7605	1.	2.231	+1099A		PBEM 1134	2	.46.4	100.	13.5
+1094 NO	1.	.70344	1.909	+1099A		+1134 NO	1.	.50.68		+1134A	
+1094A O.	1.	7.80-2		+1099A		+1134A O.	1.	.-8.82-2			
PBEM 1095	2	0.62528	1.	2.245	+1099A		PBEM 1135	2	20.300	1.	.1.601
+1095 NO	1.	.56416	5.554	+1099A		+1135 NO	1.	.0.39600		+1135A	
+1095A O.	1.	.103		+1099A		+1135A O.	1.	.5.214			
PBEM 1096	2	1.12832	1.	3.720	+1099A		PBEM 1136	2	17.900	1.	.1.469
+1096 NO	1.	1.03488	3.138	+1099A		+1136 NO	1.	.0.35300		+1136A	
+1096A O.	1.	8.64-2		+1099A		+1136A O.	1.	.4.849			
PBEM 1097	2	0.58212	1.	.9936	+1099A		PBEM 1137	2	.35.300	1.	.4.849
+1097 NO	1.	.0.52038	.794	+1099A		+1137 NO	1.	.0.39.910		+1137A	
+1097A O.	1.	.112		+1099A		+1137A O.	1.	.7.360			
PBEM 1098	2	0.46256	1.	.878	+1099A		PBEM 1138	2	.39.91	100.	10.5
+1098 NO	1.	.0.41088	.692	+1099A		+1138 NO	1.	.40.37		+1138A	
+1098A O.	1.	.118		+1099A		+1138A O.	1.	.-1.15-2			
PBEM 1099	2	0.56496	1.	2.968	+1099A		PBEM 1139	2	.15.900	1.	.1.286

+1139 NO	1.0	31.800	4.283		+1139A		+1186 NO	1.0	21.000	7.00000		+1186A		
+1139A O.	1.	.667			+1140		+1186A O.	1.	.0524			+1187		
PBEAM 1140	2	14.000	1.	.836	+1140		PBEAM 1187	2	21.000	1.	.265	+1187		
+1140 NO	1.0	28.200	2.827		+1140A		+1187 NO	1.0	16.200	.95000		+1187A		
+1140A O.	1.	.673			+1141		+1187A O.	1.	.2581					
PBEAM 1141	2	28.200	1.	2.827	.001	+1141A		PBEAM 1188	2	16.200	1.	.265	+1188	
+1141 NO	1.0	32.160	4.634		+1142		+1188 NO	1.0	10.900	.30000		+1188A		
+1141A O.	1.	.131			+1142A		+1188A O.	1.	.3911					
PBEAM 1142	2	32.16	100.	7.94	10.	+1142A		PBEAM 1189	2	10.900	1.	.265	+1189	
+1142 NO	1.	32.70			+1143		+1189 NO	1.0	5.690	.04000		+1189A		
+1142A O.	1.	.167-2			+1143A		+1189A O.	1.	.6281					
PBEAM 1143	2	12.800	1.	.537	+1144		PBEAM 1190	2	3.414	100.	1.1	.001	+1190	
+1143 NO	1.0	26.050	1.860		+1144A		+1190 NO	1.	2.802	1.0			+1190A	
+1143A O.	1.	.682			+1145		+1190A O.	1.	.197					
PBEAM 1144	2	11.190	1.	.541	.001	+1145A		+1191 NO	1.0	18.680	1.	.265	+1191	
+1144 NO	1.0	23.000	1.894		+1146		+1191 NO	1.0	18.680	5.80000		+1191A		
+1144A O.	1.	.691			+1146A		+1191A O.	1.	.0000					
PBEAM 1145	2	23.000	1.	1.894	.001	+1147		PBEAM 1192	2	18.680	1.	.265	+1192	
+1145 NO	1.0	25.560	3.414		+1147A		+1192 NO	1.0	14.740	.28300		+1192A		
+1145A O.	1.	.105			+1148		+1192A O.	1.	.2358					
PBEAM 1146	2	25.56	100.	6.5	.001	+1148A		PBEAM 1193	2	14.740	1.	.265	+1193	
+1146 NO	1.	27.16			+1149		+1193 NO	1.0	9.990	.09600		+1193A		
+1146A O.	1.	.6707-2			+1149A		+1193A O.	1.	.3841					
PBEAM 1147	2	9.060	1.	.492	+1150		PBEAM 1194	2	9.990	1.	.09600	.265	+1194	
+1147 NO	1.0	19.800	1.700		+1150A		+1194 NO	1.0	5.250	.01400		+1194A		
+1147A O.	1.	.744			+1151		+1194A O.	1.	.6220					
PBEAM 1148	2	7.640	1.	.210	+1151A		PBEAM 1195	2	35.960	1.	.5.14100	.265	+1195	
+1148 NO	1.0	17.500	.929		+1152		+1195 NO	1.0	33.740	5.15000		+1195A		
+1148A O.	1.	.784			+1152A		+1195A O.	1.	.0637					
PBEAM 1149	2	17.500	1.	.929	.001	+1153		PBEAM 1196	2	33.740	1.	.5.13000	.265	+1196
+1149 NO	1.0	18.620	1.942		+1153A		+1196 NO	1.0	26.740	.22400		+1196A		
+1149A O.	1.	.062			+1154		+1196A O.	1.	.2315					
PBEAM 1150	2	18.62	100.	4.32	10.	+1154A		PBEAM 1197	2	26.740	1.	.22400	.265	+1197
+1150 NO	1.	19.3			+1155		+1197 NO	1.0	18.100	.07510		+1197A		
+1150A O.	1.	.359-2			+1155A		+1197A O.	1.	.3854					
PBEAM 1151	2	7.100	1.	.042	+1156		PBEAM 1198	2	18.100	1.	.07510	.265	+1198	
+1151 NO	1.0	16.900	.269		+1156A		+1198 NO	1.0	9.500	.01143		+1198A		
+1151A O.	1.	.817			+1157		+1198A O.	1.	.6232					
PBEAM 1152	2	22.300	1.	1.150	+1157A		PBEAM 1199	2	0.924	100.	0.32	.001	+1199	
+1152 NO	1.0	24.900	1.440		+1158		+1199 NO	1.	0.7535	0.25		+1199A		
+1152A O.	1.	.110			+1158A		+1199A O.	1.	.203					
PBEAM 1153	2	20.300	1.	.870	+1159		PBEAM 1200	2	15.070	1.	.3.20000	.265	+1200	
+1153 NO	1.0	22.300	1.150		+1159A		+1200 NO	1.0	15.070	3.20000		+1200A		
+1153A O.	1.	.094			+1160		+1200A O.	1.	.0000					
PBEAM 1154	2	17.900	1.	.630	+1160A		+1200A NO	1.0	4.260	.00880		+1203A		
+1154 NO	1.0	20.300	.870		+1161		+1203A O.	1.	.6236					
+1154A O.	1.	.126			+1161A		PBEAM 1201	2	15.070	1.	.3.20000	.265	+1201	
PBEAM 1155	2	15.900	1.	.470	+1161A		+1201 NO	1.0	13.370	.17300		+1201A		
+1155 NO	1.0	17.900	.630		+1162		+1201A O.	1.	.1195					
+1155A O.	1.	.118			+1162A		PBEAM 1202	2	13.370	1.	.17300	.265	+1202	
PBEAM 1156	2	14.000	1.	.340	+1162A		+1202 NO	1.0	8.120	.05600		+1202A		
+1156 NO	1.0	15.900	.470		+1163		+1202A O.	1.	.4886					
+1156A O.	1.	.127			+1163A		PBEAM 1203	2	8.120	1.	.05600	.265	+1203	
PBEAM 1157	2	12.800	1.	.260	+1164		+1203 NO	1.0	4.260	.00880		+1203A		
+1157 NO	1.0	14.000	.340		+1164A		+1203A O.	1.	.6236					
+1157A O.	1.	.090			+1165		PBEAM 1204	2	15.940	1.	.2.00000	.265	+1204	
PBEAM 1158	2	11.190	1.	.280	+1165A		+1204 NO	1.0	13.940	2.00000		+1204A		
+1158 NO	1.0	12.800	.260		+1166		+1204A O.	1.	.1339					
+1158A O.	1.	.134			+1166A		PBEAM 1205	2	13.940	1.	.2.00000	.265	+1205	
PBEAM 1159	2	9.060	1.	.260	+1166A		+1205 NO	1.0	11.130	.10800		+1205A		
+1159 NO	1.0	11.190	.280		+1167		+1205A O.	1.	.2242					
+1159A O.	1.	.210			+1167A		PBEAM 1206	2	11.130	1.	.10800	.265	+1206	
PBEAM 1160	2	7.640	1.	.170	+1167A		+1206 NO	1.0	7.530	.03700		+1206A		
+1160 NO	1.0	9.060	.260		+1168		+1206A O.	1.	.3859					
+1160A O.	1.	.170			+1168A		PBEAM 1207	2	7.530	1.	.03700	.265	+1207	
PBEAM 1161	2	7.100	1.	.120	+1169		+1207 NO	1.0	3.950	.00580		+1207A		
+1161 NO	1.0	7.640	.170		+1170		+1207A O.	1.	.6237					
+1161A O.	1.	.073			+1170A		PBEAM 1208	2	12.820	1.	.1.20000	.265	+1208	
PBEAM 1162	2	43.800	1.	5.189	+1171		+1208 NO	1.0	12.820	1.20000		+1208A		
+1162 NO	1.0	41.600	5.636		+1171A		+1208A O.	1.	.0000					
+1162A O.	1.	.052			+1172		PBEAM 1209	2	12.820	1.	.1.20000	.265	+1209	
PBEAM 1163	2	39.600	1.	4.049	+1172A		+1209 NO	1.0	10.280	.07100		+1209A		
+1163 NO	1.0	43.800	5.170		+1173		+1209A O.	1.	.2199					
+1163A O.	1.	.101			+1173A		PBEAM 1210	2	10.280	1.	.07100	.265	+1210	
PBEAM 1164	2	35.300	1.	3.053	+1174		+1210 NO	1.0	6.960	.02500		+1210A		
+1164 NO	1.0	39.600	4.049		+1175		+1210A O.	1.	.3852					
+1164A O.	1.	.115			+1175A		PBEAM 1211	2	6.960	1.	.02500	.265	+1211	
PBEAM 1165	2	31.800	1.	2.384	+1176		+1211 NO	1.0	3.640	.00370		+1211A		
+1165 NO	1.0	35.300	3.040		+1176A		+1211A O.	1.	.6264					
+1165A O.	1.	.104			+1177		PBEAM 1212	2	0.7055	100.	0.32	.001	+1212	
PBEAM 1166	2	28.200	1.	1.762	+1177A		+1212 NO	1.0	0.63	0.25		+1212A		
+1166 NO	1.0	31.800	2.354		+1178		+1212A O.	1.	.113					
+1166A O.	1.	.120			+1179		PBEAM 1213	2	12.600	1.	.70000	.265	+1213	
PBEAM 1167	2	26.050	1.	1.444	+1179A		+1213 NO	1.0	11.690	.70000		+1213A		
+1167 NO	1.0	28.200	1.754		+1180		+1213A O.	1.	.70000	.265				
+1167A O.	1.	.079			+1180A		PBEAM 1214	2	11.690	1.	.05530	.265	+1214	
PBEAM 1168	2	23.000	1.	1.274	+1180A		+1214 NO	1.0	9.420	.05530		+1214A		
+1168 NO	1.0	26.050	1.431		+1181		+1214A O.	1.	.2151					
+1168A O.	1.	.124			+1181A		PBEAM 1215	2	9.420	1.	.05530	.265	+1215	
PBEAM 1169	2	19.800	1.	1.019	+1181A		+1215 NO	1.0	6.360	.01900		+1215A		
+1169 NO	1.0	23.000	1.269		+1182		+1215A O.	1.	.3878					
+1169A O.	1.	.150			+1182A		PBEAM 1216	2	6.360	1.	.01900	.265	+1216	
PBEAM 1170	2	17.500	1.	.706	+1182A		+1216 NO	1.0	3.330	.00290		+1216A		
+1170 NO	1.0	19.800	1.007		+1183		+1216A O.	1.	.6254					
+1170A O.	1.	.123			+1183A		PBEAM 1217	2	11.400	1.	.40000	.265	+1217	
PBEAM 1171	2	16.900	1.	.588	+1183A		+1217 NO	1.0	10.620	.40000		+1217A		
+1171 NO	1.0	17.500	.709		+1184		+1217A O.	1.	.0708					
+1171A O.	1.	.035			+1184A		PBEAM 1218	2	10.620	1.	.40000	.265	+1218	
PBEAM 1172	2	0.341	100.	4.328	.001	+1184A		+1218 NO	1.0	8.570	.01970		+1218A	
+1172 NO	1.	1.0025	10.953		+1185		+1218A O.	1.	.2137					
+1172A O.	1.	.984			+1185A		PBEAM 1219	2	8.570	1.	.01970	.265	+1219	
PBEAM 1173	2	1.604												

+1234	NO	1.0	.253	.93783		+1234A	PBEAM	2015	2	2870.5271.	.200	.001	+2015	
+1234A	O.	1.	.1	-.1127		+1235	PBEAM	2016	2	1965.2331.	.470	.001	+2016	
PBEAM	1235	2	.125	1.	.55802	.00	+1235A	PBEAM	2017	2	617.482 1.	.108	.001	+2017
+1235	NO	1.0	.136	.65330		+1236	PBEAM	2018	2	1398.2001.	.104	.001	+2018	
+1235A	O.	1.	.1	-.0779		+1236A	PBEAM	2019	2	2178.8191.	.100	.001	+2019	
PBEAM	1236	2	.115	1.	.40738	.300	+1237	PBEAM	2019	2	2178.8191.	.100	.001	+2019
+1236	NO	1.0	.125	.48321		+1237A	PBEAM	2020	2	1488.0001.	.120	.001	+2020	
+1236A	O.	1.	.1	-.0837		+1238	PBEAM	2020	1.	797.200 1.	.140			
PBEAM	1237	2	.175	1.	.28956	.150	+1238A	PBEAM	2021	2	454.845 1.	.100	.001	+2021
+1237	NO	1.0	.192	.34903		+1239	PBEAM	2022	2	832.800 1.	.110	.001	+2022	
+1237A	O.	1.	.1	-.0922		+1240	PBEAM	2022	1.	1210.7881.	.120	.001	+2023	
PBEAM	1238	2	.096	1.	.20137	.075	+1241	PBEAM	2023	2	1210.7881.	.120	.001	+2023
+1238	NO	1.0	.105	.24515		+1241A	PBEAM	2023	1.	852.600 1.	.126	.001	+2024	
+1238A	O.	1.	.1	-.0959		+1242	PBEAM	2024	2	852.600 1.	.126	.001	+2024	
PBEAM	1241	2	16.200	1.	.01850	3.000	+1242A	PBEAM	2024	1.	494.505 1.	.131		
+1241	NO	1.0	53.180	.26000		+1243	PBEAM	2025	2	203.896 1.	.44.200	.001	+2031	
+1241A	O.	1.	.1	-1.0660		+1243A	PBEAM	2025	1.	173.400 1.	.22.970	.001	+2032	
PBEAM	1242	2	18.740	1.	.01400	2.000	+1244	PBEAM	2025	2	173.400 1.	.22.970	.001	+2032
+1242	NO	1.0	16.200	.01850		+1244A	PBEAM	2025	1.	142.957 1.	.1740	.001	+2033	
+1242A	O.	1.	.1	-.0944		+1245	PBEAM	2026	2	142.957 1.	.1740	.001	+2033	
PBEAM	1243	2	13.370	1.	.00940	.900	+1245A	PBEAM	2026	1.	127.400 1.	.1339	.001	+2034
+1243	NO	1.0	14.740	.01400		+1246	PBEAM	2026	2	127.400 1.	.1339	.001	+2034	
+1243A	O.	1.	.1	-.0975		+1246A	PBEAM	2026	1.	111.788 1.	.937	.001	+2035	
PBEAM	1244	2	13.370	1.	.00690	.700	+1247	PBEAM	2027	2	111.788 1.	.937	.001	+2035
+1244	NO	1.0	13.370	.00940		+1247A	PBEAM	2027	1.	73.800 1.	.395	.001	+2036	
+1244A	O.	1.	.1	.0000		+1248	PBEAM	2028	2	73.800 1.	.395	.001	+2036	
PBEAM	1245	2	11.130	1.	.00450	.400	+1248A	PBEAM	2028	1.	61.748 1.	.300	.001	+2037
+1245	NO	1.0	13.370	.00690		+1249	PBEAM	2029	2	61.748 1.	.300	.001	+2037	
+1245A	O.	1.	.1	-.1829		+1250	PBEAM	2029	1.	53.600 1.	.205	.001	+2038	
PBEAM	1246	2	10.280	1.	.00330	.300	+1251	PBEAM	2030	2	53.600 1.	.205	.001	+2038
+1246	NO	1.0	11.130	.00450		+1251A	PBEAM	2030	1.	45.484 1.	.110	.001	+2039	
+1246A	O.	1.	.1	-.0794		+1252	PBEAM	2031	2	45.484 1.	.110	.001	+2039	
PBEAM	1247	2	9.420	1.	.00210	.150	+1252A	PBEAM	2031	1.	35.744 1.	.61.000	.001	+2040
+1247	NO	1.0	10.280	.00330		+1253	PBEAM	2032	2	35.744 1.	.61.000	.001	+2040	
+1247A	O.	1.	.1	-.0873		+1253A	PBEAM	2032	1.	35.744 1.	.61.000	.001	+2040	
PBEAM	1248	2	8.570	1.	.00150	.075	+1254	PBEAM	2033	2	35.744 1.	.61.000	.001	+2040
+1248	NO	1.0	9.420	.00210		+1254A	PBEAM	2033	1.	35.744 1.	.61.000	.001	+2040	
+1248A	O.	1.	.1	-.0945		+1255	PBEAM	2034	2	35.744 1.	.61.000	.001	+2040	
PBEAM	1251	2	10.900	1.	.00604	3.000	+1255A	PBEAM	2034	1.	35.744 1.	.61.000	.001	+2040
+1251	NO	1.0	35.740	.08200		+1256	PBEAM	2035	2	35.744 1.	.61.000	.001	+2040	
+1251A	O.	1.	.1	-1.0652		+1256A	PBEAM	2035	1.	35.744 1.	.61.000	.001	+2040	
PBEAM	1252	2	9.990	1.	.00460	2.000	+1257	PBEAM	2036	2	35.744 1.	.61.000	.001	+2040
+1252	NO	1.0	10.900	.00604		+1257A	PBEAM	2036	1.	35.744 1.	.61.000	.001	+2040	
+1252A	O.	1.	.1	-.0871		+1258	PBEAM	2037	2	35.744 1.	.61.000	.001	+2040	
PBEAM	1253	2	9.050	1.	.00315	.900	+1258A	PBEAM	2037	1.	35.744 1.	.61.000	.001	+2040
+1253	NO	1.0	9.990	.00460		+1259	PBEAM	2038	2	35.744 1.	.61.000	.001	+2040	
+1253A	O.	1.	.1	-.0987		+1259A	PBEAM	2038	1.	35.744 1.	.61.000	.001	+2040	
PBEAM	1254	2	8.120	1.	.00232	.700	+1260	PBEAM	2039	2	35.744 1.	.61.000	.001	+2040
+1254	NO	1.0	9.050	.00315		+1260A	PBEAM	2039	1.	35.744 1.	.61.000	.001	+2040	
+1254A	O.	1.	.1	-.1083		+1261	PBEAM	2040	2	35.744 1.	.61.000	.001	+2040	
PBEAM	1255	2	7.530	1.	.00149	.400	+1261A	PBEAM	2040	1.	35.744 1.	.61.000	.001	+2040
+1255	NO	1.0	8.120	.00232		+1262	PBEAM	2041	2	35.744 1.	.61.000	.001	+2040	
+1255A	O.	1.	.1	-.0754		+1262A	PBEAM	2041	1.	35.744 1.	.61.000	.001	+2040	
PBEAM	1256	2	6.960	1.	.00112	.300	+1263	PBEAM	2042	2	35.744 1.	.61.000	.001	+2040
+1256	NO	1.0	7.530	.00149		+1263A	PBEAM	2042	1.	35.744 1.	.61.000	.001	+2040	
+1256A	O.	1.	.1	-.0787		+1264	PBEAM	2043	2	35.744 1.	.61.000	.001	+2040	
PBEAM	1257	2	6.360	1.	.00074	.150	+1264A	PBEAM	2043	1.	35.744 1.	.61.000	.001	+2040
+1257	NO	1.0	6.960	.00112		+1265	PBEAM	2044	2	35.744 1.	.61.000	.001	+2040	
+1257A	O.	1.	.1	-.0901		+1266	PBEAM	2044	1.	35.744 1.	.61.000	.001	+2040	
PBEAM	1258	2	5.750	1.	.00049	.075	+1266A	PBEAM	2045	2	35.744 1.	.61.000	.001	+2040
+1258	NO	1.0	6.360	.00074		+1267	PBEAM	2045	1.	35.744 1.	.61.000	.001	+2040	
+1258A	O.	1.	.1	-.1007		+1267A	PBEAM	2046	2	35.744 1.	.61.000	.001	+2040	
PBEAM	1261	2	5.690	1.	.00089	3.000	+1268	PBEAM	2046	1.	35.744 1.	.61.000	.001	+2040
+1261	NO	1.0	18.490	.01210		+1268A	PBEAM	2046	2	35.744 1.	.61.000	.001	+2040	
+1261A	O.	1.	.1	-.10587		+1269	PBEAM	2047	2	35.744 1.	.61.000	.001	+2040	
PBEAM	1262	2	5.250	1.	.00068	2.000	+1269A	PBEAM	2047	1.	35.744 1.	.61.000	.001	+2040
+1262	NO	1.0	5.690	.00089		+1270	PBEAM	2048	2	35.744 1.	.61.000	.001	+2040	
+1262A	O.	1.	.1	-.0804		+1271	PBEAM	2048	1.	35.744 1.	.61.000	.001	+2040	
PBEAM	1263	2	4.750	1.	.00047	.900	+1271A	PBEAM	2049	2	35.744 1.	.61.000	.001	+2040
+1263	NO	1.0	5.250	.00068		+1272	PBEAM	2049	1.	35.744 1.	.61.000	.001	+2040	
+1263A	O.	1.	.1	-.1000		+1273	PBEAM	2050	2	35.744 1.	.61.000	.001	+2040	
PBEAM	1264	2	4.260	1.	.00035	.700	+1273A	PBEAM	2050	1.	35.744 1.	.61.000	.001	+2040
+1264	NO	1.0	4.750	.00047		+1274	PBEAM	2051	2	35.744 1.	.61.000	.001	+2040	
+1264A	O.	1.	.1	-.1088		+1275	PBEAM	2051	1.	35.744 1.	.61.000	.001	+2040	
PBEAM	1265	2	3.950	1.	.00023	.400	+1275A	PBEAM	2052	2	35.744 1.	.61.000	.001	+2040
+1265	NO	1.0	4.260	.00035		+1276	PBEAM	2052	1.	35.744 1.	.61.000	.001	+2040	
+1265A	O.	1.	.1	-.0755		+1277	PBEAM	2053	2	35.744 1.	.61.000	.001	+2040	
PBEAM	1266	2	3.640	1.	.00017	.300	+1277A	PBEAM	2053	1.	35.744 1.	.61.000	.001	+2040
+1266	NO	1.0	3.950	.00023		+1278	PBEAM	2054	2	35.744 1.	.61.000	.001	+2040	
+1266A	O.	1.	.1	-.0817		+1279	PBEAM	2054	1.	35.744 1.	.61.000	.001	+2040	
PBEAM	1267	2	3.330	1.	.00011	.150	+1279A	PBEAM	2055	2	35.744 1.	.61.000	.001	+2040
+1267	NO	1.0	3.640	.00017		+1280	PBEAM	2055	1.	35.744 1.	.61.000	.001	+2040	
+1267A	O.	1.	.1	-.0890		+1281	PBEAM	2056	2	35.744 1.	.61.000	.001	+2040	
PBEAM	1268	2	2.990	1.	.00008	.075	+1281A	PBEAM	2056	1.	35.744 1.	.61.000	.001	+2040
+1268	NO	1.0	3.330	.00011		+1282	PBEAM	2056	2	35.744 1.	.61.000	.001	+2040	
+1268A	O.	1.	.1	-.1076		+1283	PBEAM	2057	2	35.744 1.	.61.000	.001	+2040	
PBEAM	2001	2	2038.9591.	.2060	.001	+1283A	PBEAM	2057	1.	35.744 1.	.61.000	.001	+2040	
+2001	NO	1.	3806.7001.	19.530		+1284	PBEAM	2058	2	35.744 1.	.61.000	.001	+2040	
PBEAM	2002	2	3806.7001.	19.530	.001	+1284A	PBEAM	2058	1.	35.744 1.	.61.000	.001	+2040	
+2002	NO	1.	5574.420											

PSHEAR	202	1	.1570		RBAR	106	57	2057	123456	123
PSHEAR	203	1	.1347		RBAR	107	66	1066	123456	123
PSHEAR	204	1	.01775		RBAR	108	66	2066	123456	123
PSHEAR	642	2	.0382		RBAR	109	69	1069	123456	123
PSHEAR	646	2	.0382		RBAR	110	69	2069	123456	123
PSHEAR	650	2	.0382		RBAR	111	79	1079	123456	123
PSHEAR	651	1	.028		RBAR	112	79	2079	123456	123
PSHEAR	652	1	.042		RBAR	113	82	1082	123456	123
PSHEAR	653	1	.042		RBAR	114	82	2082	123456	123
PSHEAR	654	1	.04225		RBAR	115	94	1094	123456	123
PSHEAR	655	1	.042		RBAR	116	94	2094	123456	123
PSHEAR	656	1	.0425		RBAR	117	114	1114	123456	123
PSHEAR	657	1	.04275		RBAR	118	114	2114	123456	123
PSHEAR	658	1	.08583		RBAR	119	121	1121	123456	123
PSHEAR	659	1	.090		RBAR	120	121	2121	123456	123
PSHEAR	660	1	.0635		RBAR	121	34	35	123456	123
PSHELL	601	601	.240		RBAR	122	40	41	123456	123
PSHELL	602	601	.296		RBAR	123	48	49	123456	123
PSHELL	603	601	.368		RBAR	124	57	58	123456	123
PSHELL	604	601	.378		RBAR	125	69	70	123456	123
PSHELL	605	601	.274		RBAR	126	82	83	123456	123
PSHELL	606	606	.247		RBAR	127	115	116	123456	123
PSHELL	607	606	.252		RBAR	128	33	31	123456	123
PSHELL	608	606	.341		RBAR	129	39	37	123456	
PSHELL	609	606	.438		RBAR	130	47	45	123456	
PSHELL	610	606	.410		RBAR	131	56	54	123456	
PSHELL	611	606	.279		RBAR	132	68	66	123456	
PSHELL	612	5	.252		RBAR	133	81	121	123456	123
PSHELL	613	5	.323		RBAR	215	275	1275	123456	123
PSHELL	614	5	.384		RBAR	216	275	2275	123456	123
PSHELL	615	5	.313		RBAR	217	276	1276	123456	123
PSHELL	616	5	.234		RBAR	218	276	2276	123456	123
PSHELL	617	5	.271		RBAR	219	280	1280	123456	123
PSHELL	618	5	.275		RBAR	220	280	2280	123456	123
PSHELL	619	5	.292		RBAR	221	290	1290	123456	123
PSHELL	620	5	.271		RBAR	222	290	2290	123456	123
PSHELL	621	5	.210		RBAR	223	292	1292	123456	123
PSHELL	622	5	.267		RBAR	224	292	2292	123456	123
PSHELL	623	5	.271		RBAR	225	293	1293	123456	123
PSHELL	624	5	.253		RBAR	226	293	2293	123456	123
PSHELL	625	5	.194		RBAR	227	464	1464	123456	123
PSHELL	626	5	.255		RBAR	228	464	2464	123456	123
PSHELL	627	5	.245		RBAR	229	465	1465	123456	123
PSHELL	628	5	.245		RBAR	230	465	2465	123456	123
PSHELL	629	5	.195		RBAR	231	466	1466	123456	123
PSHELL	630	5	.187		RBAR	232	466	2466	123456	123
PSHELL	631	5	.187		RBAR	233	467	1467	123456	123
PSHELL	632	5	.226		RBAR	234	467	2467	123456	123
PSHELL	633	5	.226		RBAR	235	293	294	123456	123
PSHELL	634	5	.191		RBAR	236	290	291	123456	123
PSHELL	635	5	.191		RBAR	237	276	277	123456	123
PSHELL	636	2	.214		RBAR	238	298	195	123456	12456
PSHELL	637	2	.213		RBAR	239	284	196	123456	12456
PSHELL	638	2	.214		RBAR	1311	19	1019	123456	123
PSHELL	639	2	.210		RBAR	1312	19	2019	123456	123
PSHELL	640	2	.195		RBAR	1313	20	1020	123456	123
PSHELL	641	2	.189		RBAR	1314	20	2020	123456	123
PSHELL	643	2	.205		RBAR	1315	21	1021	123456	123
PSHELL	644	2	.205		RBAR	1316	21	2021	123456	123
PSHELL	645	2	.200		RBAR	1317	22	1022	123456	123
PSHELL	647	2	.400		RBAR	1318	22	2022	123456	123
PSHELL	648	2	.400		RBAR	1319	23	1023	123456	123
PSHELL	649	2	.400		RBAR	1320	23	2023	123456	123
PSHELL	661	1	.219		RBAR	1321	24	1024	123456	123
PSHELL	662	1	.169		RBAR	1322	24	2024	123456	123
PSHELL	663	1	.116		RBAR	1323	25	1025	123456	123
PSHELL	664	1	.207		RBAR	1324	25	2025	123456	123
PSHELL	665	1	.158		RBAR	1325	26	1026	123456	123
PSHELL	666	1	.104		RBAR	1326	26	2026	123456	123
PSHELL	667	1	.190		RBAR	1327	27	1027	123456	123
PSHELL	668	1	.1454		RBAR	1328	27	2027	123456	123
PSHELL	669	1	.097		RBAR	1329	29	1029	123456	123
PSHELL	670	1	.173		RBAR	1330	29	2029	123456	123
PSHELL	671	1	.133		RBAR	1331	30	1030	123456	123
PSHELL	672	1	.089		RBAR	1332	30	2030	123456	123
PSHELL	673	1	.156		RBAR	1333	32	1032	123456	123
PSHELL	674	1	.123		RBAR	1334	32	2032	123456	123
PSHELL	675	1	.083		RBAR	1335	33	1033	123456	123
PSHELL	676	1	.148		RBAR	1336	33	2033	123456	123
PSHELL	677	1	.115		RBAR	1337	38	1038	123456	123
PSHELL	678	1	.078		RBAR	1338	38	2038	123456	123
PSHELL	679	1	.137		RBAR	1339	39	1039	123456	123
PSHELL	680	1	.107		RBAR	1340	39	2039	123456	123
PSHELL	681	1	.073		RBAR	1341	44	1044	123456	123
PSHELL	682	1	.127		RBAR	1342	44	2044	123456	123
PSHELL	683	1	.100		RBAR	1343	46	1046	123456	123
PSHELL	684	1	.068		RBAR	1344	46	2046	123456	123
PSHELL	701	701	.175		RBAR	1345	47	1047	123456	123
PSHELL	702	702	.121		RBAR	1346	47	2047	123456	123
PSHELL	703	703	.093		RBAR	1347	51	1051	123456	123
PSHELL	704	704	.085		RBAR	1348	51	2051	123456	123
PSHELL	705	705	.074		RBAR	1349	52	1052	123456	123
PSHELL	706	706	.230		RBAR	1350	52	2052	123456	123
PSHELL	707	707	.132		RBAR	1351	53	1053	123456	123
PSHELL	708	708	.097		RBAR	1352	53	2053	123456	123
PSHELL	709	709	.085		RBAR	1353	55	1055	123456	123
PSHELL	710	710	.072		RBAR	1354	55	2055	123456	123
RBAR	23	283	407	123456	RBAR	1355	56	1056	123456	123
RBAR	24	281	409	123456	RBAR	1356	60	2056	123456	123
RBAR	91	31	1031	123456	RBAR	1357	60	1060	123456	123
RBAR	92	31	2031	123456	RBAR	1358	60	2060	123456	123
RBAR	93	38	1034	123456	RBAR	1359	61	1061	123456	123
RBAR	94	34	2034	123456	RBAR	1360	61	2061	123456	123
RBAR	95	37	1037	123456	RBAR	1361	62	1062	123456	123
RBAR	96	37	2037	123456	RBAR	1362	62	2062	123456	123
RBAR	97	40	1040	123456	RBAR	1363	63	1063	123456	123
RBAR	98	40	2040	123456	RBAR	1364	63	2063	123456	123
RBAR	99	45	1045	123456	RBAR	1365	64	1064	123456	123
RBAR	100	45	2045	123456	RBAR	1366	64	2064	123456	123
RBAR	101	48	1048	123456	RBAR	1367	65	1065	123456	123
RBAR	102	48	2048	123456	RBAR	1368	65	2065	123456	123
RBAR	103	54	1054	123456	RBAR	1369	67	1067	123456	123
RBAR	104	54	2054	123456	RBAR	1370	67	2067	123456	123
RBAR	105	57	1057	123456	RBAR	1371	68	1068	123456	123

RBAR	1372	68	2068	123456	123	RBAR	1508	99	2099	123456	123
RBAR	1373	72	1072	123456	123	RBAR	1509	100	1100	123456	123
RBAR	1374	72	2072	123456	123	RBAR	1510	100	2100	123456	123
RBAR	1375	73	1073	123456	123	RBAR	1511	101	1101	123456	123
RBAR	1376	73	2073	123456	123	RBAR	1512	101	2101	123456	123
RBAR	1377	74	1074	123456	123	RBAR	1513	102	1102	123456	123
RBAR	1378	74	2074	123456	123	RBAR	1514	102	2102	123456	123
RBAR	1379	75	1075	123456	123	RBAR	1515	103	1103	123456	123
RBAR	1380	75	2075	123456	123	RBAR	1516	103	2103	123456	123
RBAR	1381	76	1076	123456	123	RBAR	1517	104	1104	123456	123
RBAR	1382	76	2076	123456	123	RBAR	1518	104	2104	123456	123
RBAR	1383	77	1077	123456	123	RBAR	1519	105	1105	123456	123
RBAR	1384	77	2077	123456	123	RBAR	1520	105	2105	123456	123
RBAR	1385	78	1078	123456	123	RBAR	1521	106	1106	123456	123
RBAR	1386	78	2078	123456	123	RBAR	1522	106	2106	123456	123
RBAR	1387	80	1080	123456	123	RBAR	1523	107	1107	123456	123
RBAR	1388	80	2080	123456	123	RBAR	1524	107	2107	123456	123
RBAR	1389	81	1081	123456	123	RBAR	1525	108	1108	123456	123
RBAR	1390	81	2081	123456	123	RBAR	1526	108	2108	123456	123
RBAR	1391	85	1085	123456	123	RBAR	1527	109	1109	123456	123
RBAR	1392	85	2085	123456	123	RBAR	1528	109	2109	123456	123
RBAR	1393	86	1086	123456	123	RBAR	1529	110	1110	123456	123
RBAR	1394	86	2086	123456	123	RBAR	1530	110	2110	123456	123
RBAR	1395	87	1087	123456	123	RBAR	1531	111	1111	123456	123
RBAR	1396	87	2087	123456	123	RBAR	1532	111	2111	123456	123
RBAR	1397	88	1088	123456	123	RBAR	1533	112	1112	123456	123
RBAR	1398	88	2088	123456	123	RBAR	1534	112	2112	123456	123
RBAR	1407	143	1143	123456	123	RBAR	1535	113	1113	123456	123
RBAR	1408	143	2143	123456	123	RBAR	1536	113	2113	123456	123
RBAR	1409	181	1181	123456	123	RBAR	1537	125	1125	123456	123
RBAR	1410	181	2181	123456	123	RBAR	1538	125	2125	123456	123
RBAR	1411	182	1182	123456	123	RBAR	1539	126	1126	123456	123
RBAR	1412	182	2182	123456	123	RBAR	1540	126	2126	123456	123
RBAR	1413	183	1183	123456	123	RBAR	1541	127	1127	123456	123
RBAR	1414	183	2183	123456	123	RBAR	1542	127	2127	123456	123
RBAR	1415	184	1184	123456	123	RBAR	1543	128	1128	123456	123
RBAR	1416	184	2184	123456	123	RBAR	1544	128	2128	123456	123
RBAR	1417	185	1185	123456	123	RBAR	1545	129	1129	123456	123
RBAR	1418	185	2185	123456	123	RBAR	1546	129	2129	123456	123
RBAR	1419	186	1186	123456	123	RBAR	1547	130	1130	123456	123
RBAR	1420	186	2186	123456	123	RBAR	1548	130	2130	123456	123
RBAR	1421	187	1187	123456	123	RBAR	1549	131	1131	123456	123
RBAR	1422	187	2187	123456	123	RBAR	1550	131	2131	123456	123
RBAR	1423	188	1188	123456	123	RBAR	1551	132	1132	123456	123
RBAR	1424	188	2188	123456	123	RBAR	1552	132	2132	123456	123
RBAR	1425	189	1189	123456	123	RBAR	1553	133	1133	123456	123
RBAR	1426	189	2189	123456	123	RBAR	1554	133	2133	123456	123
RBAR	1427	190	1190	123456	123	RBAR	1555	134	1134	123456	123
RBAR	1428	190	2190	123456	123	RBAR	1556	134	2134	123456	123
RBAR	1429	191	1191	123456	123	RBAR	1557	135	1135	123456	123
RBAR	1430	191	2191	123456	123	RBAR	1558	135	2135	123456	123
RBAR	1431	192	1192	123456	123	RBAR	1559	136	1136	123456	123
RBAR	1432	192	2192	123456	123	RBAR	1560	136	2136	123456	123
RBAR	1433	193	1193	123456	123	RBAR	1561	137	1137	123456	123
RBAR	1434	193	2193	123456	123	RBAR	1562	137	2137	123456	123
RBAR	1435	242	1242	123456	123	RBAR	1563	138	1138	123456	123
RBAR	1436	242	2242	123456	123	RBAR	1564	138	2138	123456	123
RBAR	1437	243	1243	123456	123	RBAR	1565	139	1139	123456	123
RBAR	1438	243	2243	123456	123	RBAR	1566	139	2139	123456	123
RBAR	1439	244	1244	123456	123	RBAR	1567	140	1140	123456	123
RBAR	1440	244	2244	123456	123	RBAR	1568	140	2140	123456	123
RBAR	1441	245	1245	123456	123	RBAR	1569	141	1141	123456	123
RBAR	1442	245	2245	123456	123	RBAR	1570	141	2141	123456	123
RBAR	1451	1	1001	123456	123	RBAR	1571	142	1142	123456	123
RBAR	1452	1	2001	123456	123	RBAR	1572	142	2142	123456	123
RBAR	1453	2	1002	123456	123	RBAR	2235	501	1501	123456	123
RBAR	1454	2	2002	123456	123	RBAR	2236	501	2501	123456	123
RBAR	1455	3	1003	123456	123	RBAR	2237	502	1502	123456	123
RBAR	1456	3	2003	123456	123	RBAR	2238	502	2502	123456	123
RBAR	1457	4	1004	123456	123	RBAR	2239	503	1503	123456	123
RBAR	1458	4	2004	123456	123	RBAR	2240	503	2503	123456	123
RBAR	1459	5	1005	123456	123	RBAR	2241	504	1504	123456	123
RBAR	1460	5	2005	123456	123	RBAR	2242	504	2504	123456	123
RBAR	1461	6	1006	123456	123	RBAR	2243	505	1505	123456	123
RBAR	1462	6	2006	123456	123	RBAR	2244	505	2505	123456	123
RBAR	1463	7	1007	123456	123	RBAR	2245	506	1506	123456	123
RBAR	1464	7	2007	123456	123	RBAR	2246	506	2506	123456	123
RBAR	1465	8	1008	123456	123	RBAR	2247	507	1507	123456	123
RBAR	1466	8	2008	123456	123	RBAR	2248	507	2507	123456	123
RBAR	1467	10	1010	123456	123	RBAR	2249	508	1508	123456	123
RBAR	1468	10	2010	123456	123	RBAR	2250	508	2508	123456	123
RBAR	1469	12	1012	123456	123	RBAR	2251	509	1509	123456	123
RBAR	1470	12	2012	123456	123	RBAR	2252	509	2509	123456	123
RBAR	1471	14	1014	123456	123	RBAR	2253	510	1510	123456	123
RBAR	1472	14	2014	123456	123	RBAR	2254	510	2510	123456	123
RBAR	1473	16	1016	123456	123	RBAR	2255	511	1511	123456	123
RBAR	1474	16	2016	123456	123	RBAR	2256	511	2511	123456	123
RBAR	1475	18	1018	123456	123	RBAR	2257	512	1512	123456	123
RBAR	1476	18	2018	123456	123	RBAR	2258	512	2512	123456	123
RBAR	1477	173	1173	123456	123	RBAR	2259	513	1513	123456	123
RBAR	1478	173	2173	123456	123	RBAR	2260	513	2513	123456	123
RBAR	1479	174	1174	123456	123	RBAR	2261	514	1514	123456	123
RBAR	1480	174	2174	123456	123	RBAR	2262	514	2514	123456	123
RBAR	1481	175	1175	123456	123	RBAR	2263	515	1515	123456	123
RBAR	1482	175	2175	123456	123	RBAR	2264	515	2515	123456	123
RBAR	1483	176	1176	123456	123	RBAR	2265	516	1516	123456	123
RBAR	1484	176	2176	123456	123	RBAR	2266	516	2516	123456	123
RBAR	1485	177	1177	123456	123	RBAR	2267	517	1517	123456	123
RBAR	1486	177	2177	123456	123	RBAR	2268	517	2517	123456	123
RBAR	1487	178	1178	123456	123	RBAR	2269	518	1518	123456	123
RBAR	1488	178	2178	123456	123	RBAR	2270	518	2518	123456	123
RBAR	1489	179	1179	123456	123	RBAR	2271	519	1519	123456	123
RBAR	1490	179	2179	123456	123	RBAR	2272	519	2519	123456	123
RBAR	1491	180	1180	123456	123	RBAR	2273	520	1520	123456	123
RBAR	1492	180	2180	123456	123	RBAR	2274	520	2520	123456	123
RBAR											



## Appendix B. Structural Finite Element Data for Typical LCO Case

```

ID LMTAS BLOCK 40 F-16 FLUTTER FEM TYPICAL LCO CASE
SOL 103
TIME 20
$
CEND
$
TITLE=F-16 1/2 AIRPLANE FINITE ELEMENT MODEL FOR FLUTTER ANALYSIS
SUBTI=ANTI-SYMMETRIC CENTERLINE BOUNDARY CONDITIONS // FULL XWING FUEL
LABEL=CONFIG 5 = MA41
DISP=ALL
ECHO=SORT
$ DMIG VERTICAL TAIL STIFFNESS MATRIX
KGG=VTAIL
$ EIGENVALUE EXTRACTION
METHOD=1
$ SYMMETRIC B.C. / SPC=2 FOR ANTSYMMETRIC
SPC=2
$
$ SET 203022=GRIDS USED IN FLUTTER ANALYSIS.
$ ADD GRIDS 801 THROUGH 814 FOR DYNAMIC RESPONSE.
$ SET 203022= 2, 3, 4, 5, 6,
              9, 11, 13, 15, 17,
              19, 20, 21, 26, 29,
              33, 39, 44, 47, 51,
              52, 53, 56, 60, 61,
              62, 64, 65, 68, 72,
              73, 74, 75, 77, 78,
              81, 85, 86, 87, 89,
              90, 91, 92, 93, 95,
              102, 103, 104, 105, 106,
              107, 108, 109, 110, 111,
              112, 113, 122, 123, 124,
              128, 129, 130, 131, 132,
              133, 3004,3006,3009   $ AIM-9/16S200 OR 16S200 ON TIP
$ GENERATE BUT DO NOT PRINT-
$ EIGENVECTORS FOR FLUTTER ANALYSIS
$ PRINT-
$ A-SET EIGENVECTORS FOR INSPECTION
$ OUTPUT(PLOT)
CSCALE=1.8
PAPER SIZE=26. BY 20.
$ SET 10=ELEMENTS USED IN MODE PLOTS
$ FUSELAGE CENTERLINE
SET 10= 1 THRU 26,
$ WING BOX
    1001 THRU 1005,
    1007,1010 THRU 1013,
    1020,1023 THRU 1025,
    1031,1034,1036,1043,1045,
    1046,1048 THRU 1054,
    1056 THRU 1062,
    1071 THRU 1074,
    1078,1079,1080,
    1086 THRU 1090,
    1099,1100,1101,
    1075,1076,1077,
    1081 THRU 1085,
    1091 THRU 1097,
    1102 THRU 1111,
    1116 THRU 1125,
    1126,1127,1128,
$ LEADING EDGE FLAP / 1258 ACTUATOR
    1131 THRU 1134,
    1136,1137,1138,
    1140,1141,1142,
    1144,1145,1146,
    1148 THRU 1151,
    1152 THRU 1171,
$ FLAPERON
    1181 THRU 1185,
    1187 THRU 1189,
    1190 THRU 1194,
    1196 THRU 1203,
    1205 THRU 1207,
    1209 THRU 1220,
    1231 THRU 1238,
    1251 THRU 1258,
    1261 THRU 1268,
$ HORIZONTAL TAIL
    2001 THRU 2058,
$ VERTICAL TAIL
    2401 THRU 2460,
$ 16S200 // STATION 1,9
    3003 THRU 3009,
$ AIM-9L // STATION 1,9
    3014,3015
$ MAXIMUM DEFORMATION 35.
AKES MX,MY,Z
VIEW 60.0,30.,0.
FIND SCALE ORIGIN 10 SET 10
PLOT MODAL DEF0 0 SET 10 ORIGIN 10
$
$ BEGIN BULK
ASET    3500    123456
ASET    3501    123456

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	ASET1	1	163	153	154	155	156	71	286
	ASET1	1	267						
	ASET1	1	284	281					
	ASET1	1	367	408	368	359	384		
	ASET1	1	373	364	381	383			
	ASET1	1	386	391	371	362	387	392	393
	ASET1	1	389	369	360	385	390	370	361
	ASET1	1	410						
	ASET1	1	3050	3053	3057				
	ASET1	1	3207	3210	3211	3213			
	ASET1	2	3049	3054					
	ASET1	2	3206	3212					
	ASET1	3	6	17	5	15	4	13	3
	ASET1	3	11	2	9				
	ASET1	3	19	72	20	60	73	21	61
	ASET1	3	39	47	56	68	81		
	ASET1	3	74	51	62	75	26	52	64
	ASET1	3	77	29	44	53	65	78	33
	ASET1	3	85	86	87	88			
	ASET1	3	90	103	109	89	102	108	
	ASET1	3	95	107	113	93	106	112	124
	ASET1	3	130	133	92	105	111	123	129
	ASET1	3	132	91	104	110	122	128	131
	ASET1	3	233						
	ASET1	3	251	THRU	266				
	ASET1	3	3017	3019	3022				
	ASET1	3	3046	3050	3053	3057			
	ASET1	3	3204	3210	3211	3213			
	ASET1	4	3204	3211					
	ASET1	5	153	154	155	156	71	286	284
	ASET1	5	410						
	ASET1	5	459						
	ASET1	5	3211						
	ASET1	6	437	281	410				
	ASET1	6	458						
	ASET1	6	3207	3211					
	ASET1	3456	3018						
	ASET1	123456	3060						
	CBAR	27	27	284	410	1.	1.	0.	
	CBAR	2401	2401	407	367	0.	1.	1.	
	CBAR	2402	2402	367	368	0.	1.	1.	
	CBAR	2403	2403	368	369	0.	1.	1.	
	CBAR	2404	2404	359	370	0.	1.	1.	
	CBAR	2405	2405	370	371	0.	1.	1.	
	CBAR	2406	2406	371	372	0.	1.	1.	
	CBAR	2407	2407	372	373	0.	1.	1.	
	CBAR	2408	2408	357	358	0.	1.	1.	
	CBAR	2409	2409	358	359	0.	1.	1.	
	CBAR	2410	2410	359	360	0.	1.	1.	
	CBAR	2411	2411	360	361	0.	1.	1.	
	CBAR	2412	2412	361	362	0.	1.	1.	
	CBAR	2413	2413	362	363	0.	1.	1.	
	CBAR	2414	2414	363	364	0.	1.	1.	
	CBAR	2415	2415	409	375	0.	1.	1.	
	CBAR	2416	2416	375	376	0.	1.	1.	
	CBAR	2417	2417	376	377	0.	1.	1.	
	CBAR	2418	2418	377	378	0.	1.	1.	
	CBAR	2419	2419	378	379	0.	1.	1.	
	CBAR	2420	2420	379	380	0.	1.	1.	
	CBAR	2421	2421	380	381	0.	1.	1.	
	CBAR	2422	2422	382	383	0.	1.	1.	
	CBAR	2423	2423	384	385	0.	1.	1.	
	CBAR	2424	2424	385	386	0.	1.	1.	
	CBAR	2425	2425	386	387	0.	1.	1.	
	CBAR	2426	2426	387	388	0.	1.	1.	
	CBAR	2427	2427	389	390	0.	1.	1.	
	CBAR	2428	2428	390	391	0.	1.	1.	
	CBAR	2429	2429	391	392	0.	1.	1.	
	CBAR	2430	2430	392	393	0.	1.	1.	
	CBAR	2431	2431	407	357	0.	1.	1.	
	CBAR	2432	2432	357	409	0.	1.	1.	
	CBAR	2433	2433	367	358	0.	1.	1.	
	CBAR	2434	2434	358	375	0.	1.	1.	
	CBAR	2435	2435	375	384	0.	1.	1.	
	CBAR	2436	2436	375	406	0.	1.	1.	
	CBAR	2437	2437	406	408	0.	1.	1.	
	CBAR	2438	2438	368	359	0.	1.	1.	
	CBAR	2439	2439	359	376	0.	1.	1.	
	CBAR	2440	2440	376	384	0.	1.	1.	
	CBAR	2441	2441	369	360	0.	1.	1.	
	CBAR	2442	2442	360	377	0.	1.	1.	
	CBAR	2443	2443	377	385	0.	1.	1.	
	CBAR	2444	2444	370	361	0.	1.	1.	
	CBAR	2445	2445	361	378	0.	1.	1.	
	CBAR	2446	2446	378	386	0.	1.	1.	
	CBAR	2447	2447	371	362	0.	1.	1.	
	CBAR	2448	2448	362	379	0.	1.	1.	
	CBAR	2449	2449	372	363	0.	1.	1.	
	CBAR	2450	2450	363	380	0.	1.	1.	
	CBAR	2451	2451	380	382	0.	1.	1.	
	CBAR	2452	2452	380	388	0.	1.	1.	
	CBAR	2453	2453	373	364	0.	1.	1.	
	CBAR	2454	2454	364	381	0.	1.	1.	
	CBAR	2455	2455	381	383	0.	1.	1.	
	CBAR	2456	2456	384	389	0.	1.	1.	
	CBAR	2457	2457	385	390	0.	1.	1.	
	CBAR	2458	2458	386	391	0.	1.	1.	
	CBAR	2459	2459	387	392	0.	1.	1.	
	CBAR	2460	2460	388	393	0.	1.	1.	
	CBAR	3502	3502	3500	52	1.	1.	0.	
	CBAR	3503	3503	3501	52	1.	1.	0.	
	CBEAR	1	1	163	164	0.	1.	0.	
	CBEAR	2	2	164	153	1.	0.	0.	

CBEAM	3	3	267	154	1.	0.	0.		CBEAM	1025	1025	65	78	1.	0.	0.	
CBEAM	4	4	154	155	1.	0.	0.		CBEAM	1026	1026	187	188	1.	0.	0.	+1026BM
CBEAM	5	5	155	156	1.	0.	0.		CBEAM	1027	1027	188	189	1.	0.	0.	
CBEAM	6	6	268	36	1.	0.	0.		CBEAM	1028	1028	189	190	1.	0.	0.	
CBEAM	7	7	36	42	1.	0.	0.		CBEAM	1029	1029	190	191	1.	0.	0.	
CBEAM	8	8	42	50	1.	0.	0.		CBEAM	1031	1031	26	52	1.	0.	0.	
CBEAM	9	9	50	437	1.	0.	0.		CBEAM	1033	1033	25	52	1.	0.	0.	
CBEAM	10	10	437	59	1.	0.	0.		CBEAM	1034	1034	52	64	1.	0.	0.	
CBEAM	11	11	59	431	1.	0.	0.		CBEAM	1035	1035	64	245	1.	0.	0.	
CBEAM	12	12	431	71	1.	0.	0.		CBEAM	1036	1036	64	77	1.	0.	0.	
CBEAM	13	13	71	84	1.	0.	0.		CBEAM	1037	1037	245	77	1.	0.	0.	
CBEAM	14	14	84	298	1.	0.	0.		CBEAM	1038	1038	192	193	1.	0.	0.	
CBEAM	15	15	298	286	1.	0.	0.		CBEAM	1039	1039	193	63	1.	0.	0.	
CBEAM	16	16	286	117	1.	0.	0.		CBEAM	1040	1040	63	245	1.	0.	0.	
CBEAM	17	17	117	285	1.	1.	0.		CBEAM	1041	1041	245	76	1.	0.	0.	
CBEAM	18	18	285	283	1.	1.	0.		CBEAM	1043	1043	24	51	1.	0.	0.	
CBEAM	19	19	283	284	1.	1.	0.		CBEAM	1045	1045	23	51	1.	0.	0.	
CBEAM	20	20	284	282	1.	1.	0.		CBEAM	1046	1046	51	62	1.	0.	0.	
CBEAM	21	21	282	281	1.	1.	0.		CBEAM	1047	1047	22	62	1.	0.	0.	
CBEAM	22	22	281	405	1.	0.	0.		CBEAM	1048	1048	62	244	1.	0.	0.	
CBEAM	31	31	36	35	1.	1.	0.		CBEAM	1049	1049	244	75	1.	0.	0.	
CBEAM	32	32	42	41	1.	1.	0.		CBEAM	1050	1050	75	88	1.	0.	0.	+1050BM
CBEAM	33	33	50	49	1.	1.	0.		CBEAM	1051	1051	21	61	1.	0.	0.	
CBEAM	34	34	59	58	1.	1.	0.		CBEAM	1052	1052	61	243	1.	0.	0.	
CBEAM	35	35	71	70	1.	1.	0.		CBEAM	1053	1053	243	74	1.	0.	0.	+1053BM
CBEAM	36	36	84	83	1.	1.	0.		CBEAM	1054	1054	74	87	1.	0.	0.	+1054BM
CBEAM	37	37	117	116	1.	1.	0.		CBEAM	1056	1056	20	60	1.	0.	0.	
CBEAM	38	38	34	31	1.	1.	0.		CBEAM	1057	1057	60	242	1.	0.	0.	
CBEAM	39	39	40	37	1.	1.	0.		CBEAM	1058	1058	242	73	1.	0.	0.	+1058BM
CBEAM	40	40	48	45	1.	1.	0.		CBEAM	1059	1059	73	86	1.	0.	0.	+1059BM
CBEAM	41	41	57	54	1.	1.	0.		CBEAM	1060	1060	19	143	1.	0.	0.	
CBEAM	42	42	69	66	1.	1.	0.		CBEAM	1061	1061	143	72	1.	0.	0.	
CBEAM	43	43	82	94	1.	1.	0.		CBEAM	1062	1062	72	85	1.	0.	0.	+1062BM
CBEAM	44	44	94	118	1.	1.	0.		CBEAM	1071	1071	33	32	0.	1.	0.	
CBEAM	45	45	118	121	1.	1.	0.		CBEAM	1072	1072	32	30	0.	1.	0.	
CBEAM	46	46	115	79	1.	1.	0.		CBEAM	1073	1073	30	161	0.	1.	0.	
CBEAM	47	47	79	120	1.	1.	0.		CBEAM	1074	1074	181	29	0.	1.	0.	
CBEAM	48	48	120	114	1.	1.	0.		CBEAM	1075	1075	39	38	0.	1.	0.	
CBEAM	49	49	31	37	1.	1.	0.	+49BM	CBEAM	1076	1076	38	182	0.	1.	0.	
CBEAM	50	50	37	45	1.	1.	0.		CBEAM	1077	1077	182	29	0.	1.	0.	
CBEAM	51	51	45	54	1.	1.	0.		CBEAM	1078	1078	29	27	0.	1.	0.	
CBEAM	52	52	54	66	1.	1.	0.		CBEAM	1079	1079	27	187	0.	1.	0.	
CBEAM	53	53	66	121	1.	1.	0.	+53BM	CBEAM	1080	1080	187	26	0.	1.	0.	
CBEAM	54	54	121	114	1.	1.	0.	+54BM	CBEAM	1081	1081	47	46	0.	1.	0.	
CBEAM	456	456	118	119	1.	1.	0.		CBEAM	1082	1082	46	183	0.	1.	0.	
CBEAM	55	55	118	120	1.	1.	0.		CBEAM	1083	1083	183	44	0.	1.	0.	
CBEAM	56	56	119	120	1.	1.	0.		CBEAM	1084	1084	44	183	0.	1.	0.	
CBEAM	57	57	94	79	1.	1.	0.		CBEAM	1085	1085	188	26	0.	1.	0.	
CBEAM	141	141	467	274	1.	1.	0.		CBEAM	1086	1086	26	25	0.	1.	0.	
CBEAM	142	142	274	465	1.	1.	0.		CBEAM	1087	1087	25	192	0.	1.	0.	
CBEAM	143	143	465	275	1.	1.	0.		CBEAM	1088	1088	192	24	0.	1.	0.	
CBEAM	144	144	275	278	1.	1.	0.		CBEAM	1089	1089	24	23	0.	1.	0.	
CBEAM	145	145	278	280	1.	1.	0.		CBEAM	1090	1090	23	22	0.	1.	0.	
CBEAM	146	146	280	292	1.	1.	0.		CBEAM	1091	1091	56	55	0.	1.	0.	
CBEAM	147	147	292	114	1.	1.	0.	+147BM	CBEAM	1092	1092	55	184	0.	1.	0.	
CBEAM	148	148	466	273	1.	1.	0.		CBEAM	1093	1093	184	53	0.	1.	0.	
CBEAM	149	149	273	464	1.	1.	0.		CBEAM	1094	1094	53	189	0.	1.	0.	
CBEAM	150	150	464	276	1.	1.	0.		CBEAM	1095	1095	189	52	0.	1.	0.	
CBEAM	151	151	276	279	1.	1.	0.		CBEAM	1096	1096	52	193	0.	1.	0.	
CBEAM	152	152	279	290	1.	1.	0.		CBEAM	1097	1097	51	0.	1.	0.		+1098BM
CBEAM	153	153	290	293	1.	1.	0.		CBEAM	1098	1098	51	22	0.	1.	0.	
CBEAM	154	154	293	79	1.	1.	0.	+154BM	CBEAM	1099	1099	22	21	0.	1.	0.	
CBEAM	160	160	295	300	1.	1.	0.		CBEAM	1100	1100	21	20	0.	1.	0.	
CBEAM	161	161	117	300	1.	1.	0.		CBEAM	1101	1101	20	19	0.	1.	0.	
CBEAM	162	162	300	79	1.	1.	0.		CBEAM	1102	1102	68	67	0.	1.	0.	
CBEAM	163	163	79	114	1.	1.	0.		CBEAM	1103	1103	67	185	0.	1.	0.	
CBEAM	164	164	283	295	1.	1.	0.		CBEAM	1104	1104	185	65	0.	1.	0.	
CBEAM	165	165	295	294	1.	1.	0.		CBEAM	1105	1105	65	190	0.	1.	0.	
CBEAM	166	166	293	292	1.	1.	0.		CBEAM	1106	1106	190	64	0.	1.	0.	
CBEAM	167	167	282	291	1.	1.	0.		CBEAM	1107	1107	64	63	0.	1.	0.	
CBEAM	168	168	290	280	1.	1.	0.		CBEAM	1108	1108	63	62	0.	1.	0.	
CBEAM	169	169	279	271	1.	1.	0.		CBEAM	1109	1109	62	61	0.	1.	0.	
CBEAM	169M	456	271	278	1.	1.	0.	+169BM	CBEAM	1110	1110	61	60	0.	1.	0.	
CBEAM	170	170	271	278	1.	1.	0.	+170BM	CBEAM	1111	1111	60	19	0.	1.	0.	
CBEAM	171	171	281	277	1.	1.	0.		CBEAM	1112	1112	245	244	0.	1.	0.	
CBEAM	172	172	276	275	1.	1.	0.		CBEAM	1113	1113	244	243	0.	1.	0.	
CBEAM	173	173	464	465	1.	1.	0.		CBEAM	1114	1114	243	242	0.	1.	0.	
CBEAM	174	174	466	467	1.	1.	0.		CBEAM	1115	1115	242	143	0.	1.	0.	
CBEAM	175	175	271	272	1.	1.	0.	+175BM	CBEAM	1116	1116	81	80	0.	1.	0.	
CBEAM	176	176	273	241	1.	1.	0.		CBEAM	1117	1117	80	186	0.	1.	0.	
CBEAM	177	177	241	299	1.	1.	0.		CBEAM	1118	1118	78	191	0.	1.	0.	
CBEAM	178	178	299	272	1.	1.	0.		CBEAM	1119	1119	77	0.	1.	0.		
CBEAM	179	179	272	274	1.	1.	0.		CBEAM	1120	1120	77	76	0.	1.	0.	
CBEAM	180	180	274	233	1.	1.	0.		CBEAM	1121	1121	76	0.	1.	0.		
CBEAM	181	181	195	296	1.	1.	0.		CBEAM	1122	1122	76	75	0.	1.	0.	
CBEAM	181	181	195	296	1.	1.	0.	+181BM	CBEAM	1123	1123	75	74	0.	1.	0.	
CBEAM	182	182	296	196	1.	1.	0.		CBEAM	1124	1124	74	73	0.	1.	0.	
CBEAM	182	182	296	196	1.	1.	0.	+182BM	CBEAM	1125	1125	73	72	0			



CBEAM	3396	3391	3198	183	0.	0.	1.	+3396	+342	1.6	+343	
	+3396	456						CONN1	343	87	0	
CBEAM	3397	3391	183	3199	0.	0.	1.	+3397	+343	1.8	+344	
	+3397	456						CONN1	344	88	0	
CBEAM	3398	3391	3199	46	0.	0.	1.	+3398	+344	1.	+345	
	+3398	456						CONN1	345	6	0	
CBSAM	3399	3391	3198	3200	0.	0.	1.		+345	12.03		
CBEAM	3400	3391	3200	3196	0.	0.	1.		CONN1	346	17	+346
CBEAM	3401	3391	3199	3202	0.	0.	1.		+346	57.78	+347	
CBEAM	3402	3391	3202	3197	0.	0.	1.		CONN1	347	5	0
CBEAM	3403	3391	3200	3201	0.	0.	1.	+3403	+347	10.08	+348	
	+3403	5						CONN1	348	15	0	
CBEAM	3404	3391	3201	3202	0.	0.	1.	+3404	+348	42.72	+349	
	+3404	5						CONN1	349	4	0	
CBEAM	3405	3405	3203	3204	0.	0.	1.		+349	6.92		
CBEAM	3406	3405	3204	3205	0.	0.	1.		CONN1	350	13	+350
CBEAM	3407	3407	3204	3206	0.	1.	0.	+3407	+350	27.67	+351	
	+3407	6						CONN1	351	3	0	
CBEAM	3408	3407	3206	3207	0.	1.	0.		+351	5.17		
CBEAM	3409	3409	3207	3208	0.	0.	1.		CONN1	352	11	+352
CBEAM	3410	3409	3209	3212	0.	1.	0.		+352	27.65	+353	
CBEAM	3411	3405	3210	3211	0.	0.	1.		CONN1	353	2	0
CBEAM	3412	3409	3211	3212	0.	0.	1.		+353	4.08		
CBSAM	3413	3405	3212	3213	0.	0.	1.		CONN1	354	9	+354
CBEAM	5002	5002	153	267	1.	0.	0.		+354	3.71		
CBEAM	5051	5051	156	458	1.	0.	0.		CONN1	355	95	+355
CBEAM	5052	5052	458	459	1.	0.	0.		+355	9.133		
CBEAM	5053	5053	459	268	1.	0.	0.		CONN1	356	107	+356
CELAS2	61	36.6E6	34	5	35	5	35		+356	6.765		
CELAS2	62	71.0E6	40	5	41	5	41		CONN1	357	113	+357
CELAS2	63	94.1E6	48	5	49	5	49		+357	.022		
CELAS2	64	132.4E6	57	5	58	5	58		CONN1	358	93	+358
CELAS2	65	110.0E6	69	5	70	5	70		+358	10.32		
CELAS2	66	51.7E6	82	5	83	5	83		CONN1	359	106	+359
CELAS2	67	5.0E6	115	5	116	5	116		+359	10.12		
CELAS2	191	11.25E6	277	5	276	5	276		CONN1	360	112	+360
CELAS2	192	22.0E6	291	5	290	5	290		+360	.149		
CELAS2	193	9.6E6	294	5	293	5	293		CONN1	361	124	+361
CELAS2	194	156E10	298	3	195	3	195		+361	5.816		
CELAS2	195	67829.	284	3	196	3	196		+362	7.986	+362	
CELAS2	1172	5650000.17	4	30	4	30	4		CONN1	363	133	+363
CELAS2	1173	5590000.15	4	27	4	27	4		+363	.998		
CELAS2	1174	1600000.13	4	25	4	25	4		CONN1	364	92	+364
CELAS2	1175	2030000.11	4	23	4	23	4		+364	4.56		
CELAS2	1222	3307000.142	4	141	4	141	4		CONN1	365	105	+365
CELAS2	1222	268300.	141	4	140	4	140		+365	6.797		
CELAS2	1223	137300.	140	4	139	4	139		CONN1	366	111	+366
CELAS2	1224	105200.	139	4	138	4	138		+366	.952		
CELAS2	1225	85600.	138	4	137	4	137		CONN1	367	123	+367
CELAS2	1226	69900.	137	4	136	4	136		+367	3.296		
CELAS2	1227	57700.	136	4	135	4	135		CONN1	368	129	+368
CELAS2	1228	40000.	135	4	134	4	134		+368	4.727		
CELAS2	1229	6229750.	142	4	119	4	119		CONN1	369	132	+369
CELAS2	3104	193.E6	3046	4	3054	4	3054		+369	.647		
CELAS2	3414	1515.E5	3204	4	3207	4	3207		CONN1	370	91	+370
CELAS2	3415	1724.E5	3212	4	3208	4	3208		+370	2.069		
CELAS2	3416	580.4E5	3204	6	3207	6	3207		CONN1	371	104	+371
CELAS2	3417	2652.5E5	3208	6	3209	6	3209		+371	3.014		
CELAS2	3418	732.6E5	3208	5	3209	5	3209		+372			
CONN1	301	19	0					+301	CONN1	372	110	0
	+301	9.5E5						+372		.477		
CONN1	302	72	0					+302	CONN1	373	122	0
	+302	6.7E0						+373		1.784		
CONN1	303	20	0					+303	CONN1	374	128	0
	+303	7.9E2						+374		2.632		
CONN1	304	60	0					+304	CONN1	375	131	0
	+304	10.1E0						+375		.435		
CONN1	305	73	0					+305	CONN1	376	90	0
	+305	7.7E5						+376		1.644		
CONN1	306	21	0					+306	CONN1	377	103	0
	+306	13.7E2						+377		2.354		
CONN1	307	61	0					+307	CONN1	378	109	0
	+307	20.2E5						+378		.272		
CONN1	308	74	0					+308	CONN1	379	89	0
	+308	9.9E2						+379		.651		
CONN1	309	51	0					+309	CONN1	380	102	0
	+309	32.1E6						+380		1.075		
CONN1	310	62	0					+310	CONN1	381	108	0
	+310	25.2E1						+381		.284		
CONN1	311	75	0					+311	CONN1	391	163	0
	+311	14.2E5						+391		314.21		
CONN1	312	26	0					+312	CONN1	392	153	0
	+312	42.9E2						+392		463.77		
CONN1	313	52	0					+313	CONN1	393	154	0
	+313	57.2E8						+393		870.68		
CONN1	314	64	0					+314	CONN1	394	155	0
	+314	46.6E8						+394		1299.38		
CONN1	315	77	0					+315	CONN1	395	156	0
	+315	20.9E3						+395		1545.78		
CONN1	316	29	0					+316	CONN1	396	42	0
	+316	60.677						+396		1799.25		
CONN1	317	44	0					+317	CONN1	397	71	0
	+317	80.9E4						+397		1412.77		
CONN1	318	53	0					+318	CONN1	398	286	0
	+318	74.8E1						+398		893.77		
CONN1	319	65	0					+319	CONN1	399	284	0
	+319	56.2E6						+399		335.19		
CONN1	320	78	0					+320	CONN1	400	281	0
	+320	28.3E1						+400		708.33		
CONN1	321	33	0					+321	CONN1	401	163	0
	+321	37.8E4						+321		314.21		
CONN1	322	39	0					+322	CONN1	402	153	0
	+322	99.621						+322		463.77		
CONN1	323	47	0					+323	CONN1	403	154	0
	+323	105.2E4						+323		870.68		
CONN1	324	56	0					+324	CONN1	404	155	0
	+324	95.811						+324		1299.38		
CONN1	325	68	0					+325	CONN1	405	156	0
	+325	83.620						+325		1545.78		
CONN1	326	81	0					+326	CONN1	406	42	0
	+326	33.1E8						+326		2036.16		
CONN1	341	85	0					+327	CONN1	407	71	0
	+341	.6						+327		2468.11		
CONN1	342	86	0					+328	CONN1	408	286	0
	+328	33.1E8						+328		893.77		
CONN1	341	85	0					+329	CONN1	409	284	0
	+329	4.1E8						+329		311.29		
CONN1	341	85	0					+330	CONN1	410	281	0
	+330	33.1E8						+330		796.72		
CONN1	411							+411			+411	
	+411							+411A	CONN1	411A	119126.	+411A
CONN1	412							+411A	CONN1	412	154	0
	+412							+412			+412A	



CQUAD4	669	669	1130	1133	1111	1105		C\$HEAR	74	74	1057	1069	1066	1054
CQUAD4	670	670	1139	1099	1126	1139		C\$H\$AR	75	75	1069	1082	1121	1066
CQUAD4	671	671	1099	1105	1129	1126		C\$HEAR	76	76	1094	1079	1114	1121
CQUAD4	672	672	1105	1111	1132	1129		C\$HEAR	77	71	2034	2040	2037	2031
CQUAD4	673	673	1138	1126	1098	1137		C\$HEAR	78	72	2040	2048	2045	2037
CQUAD4	674	674	1126	1129	1104	1098		C\$HEAR	79	73	2048	2057	2054	2045
CQUAD4	675	675	1129	1132	1110	1104		C\$HEAR	80	74	2057	2069	2066	2054
CQUAD4	676	676	1137	1098	1125	1136		C\$HEAR	81	75	2069	2082	2121	2066
CQUAD4	677	677	1098	1104	1128	1125		C\$HEAR	82	76	2094	2079	2114	2121
CQUAD4	678	678	1104	1110	1131	1128		C\$HEAR	201	201	1465	1464	1466	1467
CQUAD4	679	679	1136	1125	1097	1135		C\$HEAR	202	202	1275	1276	1464	1465
CQUAD4	680	680	1125	1128	1103	1097		C\$HEAR	203	203	1280	1290	1276	1275
CQUAD4	681	681	1128	1131	1109	1103		C\$HEAR	204	204	1114	1079	1293	1292
CQUAD4	682	682	1135	1097	2096	1134		C\$HEAR	205	201	2465	2464	2466	2467
CQUAD4	683	683	1097	1103	1102	1096		C\$HEAR	206	202	2275	2276	2464	2465
CQUAD4	684	684	1103	1109	1108	1102		C\$HEAR	207	203	2280	2290	2276	2275
CQUAD4	685	685	2033	2039	2038	2032		C\$HEAR	208	204	2114	2079	2293	2292
CQUAD4	686	686	2039	2047	2046	2038		C\$H\$AR	642	642	1075	1088	1087	1074
CQUAD4	687	687	2047	2056	2055	2046		C\$HEAR	646	646	1074	1087	1086	1073
CQUAD4	688	688	2056	2065	2067	2055		C\$HEAR	650	650	1073	1086	1085	1072
CQUAD4	689	689	2068	2081	2080	2067		C\$HEAR	651	651	1007	1018	1016	1006
CQUAD4	690	690	2088	2182	2181	2030		C\$HEAR	652	652	1006	1016	1180	1176
CQUAD4	691	691	2094	2183	2182	2182		C\$HEAR	653	653	1176	1180	1014	1005
CQUAD4	692	692	2095	2184	2183	2183		C\$HEAR	654	654	1005	1014	1179	1175
CQUAD4	693	693	2095	2185	2184	2184		C\$HEAR	655	655	1175	1179	1012	1004
CQUAD4	694	694	2097	2186	2185	2185		C\$HEAR	656	656	1004	1012	1178	1174
CQUAD4	695	695	2097	2187	2186	2186		C\$HEAR	657	657	1174	1178	1010	1003
CQUAD4	696	696	2098	2187	2186	2186		C\$HEAR	658	658	1003	1010	1177	1173
CQUAD4	697	697	2098	2188	2187	2187		C\$HEAR	659	659	1173	1177	1194	1002
CQUAD4	698	698	2098	2188	2187	2187		C\$HEAR	660	660	1002	1094	1008	1001
CQUAD4	699	699	2099	2188	2187	2187		C\$HEAR	642	642	2075	2088	2087	2074
CQUAD4	700	700	2099	2189	2188	2188		C\$HEAR	646	646	2074	2087	2086	2073
CQUAD4	701	701	2099	2189	2189	2189		C\$HEAR	650	650	2073	2086	2085	2072
CQUAD4	702	702	2099	2190	2190	2190		C\$HEAR	651	651	2007	2018	2016	2006
CQUAD4	703	703	2099	2190	2190	2190		C\$HEAR	652	652	2006	2016	2180	2176
CQUAD4	704	704	2099	2190	2190	2190		C\$HEAR	653	653	2176	2180	2014	2005
CQUAD4	705	705	2099	2190	2190	2190		C\$HEAR	654	654	2005	2014	2179	2175
CQUAD4	706	706	2099	2190	2190	2190		C\$HEAR	655	655	2175	2179	2012	2004
CQUAD4	707	707	2099	2190	2190	2190		C\$HEAR	656	656	2004	2012	2178	2174
CQUAD4	708	708	2099	2190	2190	2190		C\$HEAR	657	657	2174	2178	2010	2003
CQUAD4	709	709	2099	2190	2190	2190		C\$HEAR	658	658	2003	2010	2177	2173
CQUAD4	710	710	2099	2190	2190	2190		C\$HEAR	659	659	2173	2177	2194	2002
CQUAD4	711	711	2099	2190	2190	2190		C\$HEAR	660	660	2002	2194	2008	2001
CQUAD4	712	712	2099	2190	2190	2190		C\$HEAR	6105	3105	3063	3064	3066	3065
CQUAD4	713	713	2099	2190	2190	2190		C\$HEAR	3106	3105	3067	3068	3070	3069
CQUAD4	714	714	2099	2190	2190	2190		CTRIA3	606	606	1032	1038	1030	
CQUAD4	715	715	2099	2190	2190	2190		CTRIA3	612	612	1181	1182	1029	
CQUAD4	716	716	2099	2190	2190	2190		CTRIA3	617	617	1029	1044	1027	
CQUAD4	717	717	2099	2190	2190	2190		CTRIA3	622	622	1187	1188	1026	
CQUAD4	718	718	2099	2190	2190	2190		CTRIA3	626	626	1026	1052	1025	
CQUAD4	719	719	2099	2190	2190	2190		CTRIA3	629	629	1064	1245	1063	
CQUAD4	720	720	2099	2190	2190	2190		CTRIA3	630	630	1054	1077	1245	
CQUAD4	721	721	2099	2190	2190	2190		CTRIA3	631	631	1077	1076	1245	
CQUAD4	722	722	2099	2190	2190	2190		CTRIA3	636	636	1051	1023	1024	
CQUAD4	723	723	2099	2190	2190	2190		CTRIA3	637	637	1051	1022	1023	
CQUAD4	724	724	2099	2190	2190	2190		CTRIA3	638	638	1062	1022	1051	
CQUAD4	725	725	2099	2190	2190	2190		CTRIA3	647	647	1019	1020	1060	
CQUAD4	726	726	2099	2190	2190	2190		CTRIA3	650	606	2032	2038	2030	
CQUAD4	727	727	2099	2190	2190	2190		CTRIA3	612	612	2181	2182	2029	
CQUAD4	728	728	2099	2190	2190	2190		CTRIA3	617	617	2029	2041	2027	
CQUAD4	729	729	2099	2190	2190	2190		CTRIA3	622	622	2187	2188	2026	
CQUAD4	730	730	2099	2190	2190	2190		CTRIA3	626	626	2026	2052	2025	
CQUAD4	731	731	2099	2190	2190	2190		CTRIA3	629	629	2064	2245	2063	
CQUAD4	732	732	2099	2190	2190	2190		CTRIA3	630	630	2064	2077	2245	
CQUAD4	733	733	2099	2190	2190	2190		CTRIA3	631	631	2077	2076	2245	
CQUAD4	734	734	2099	2190	2190	2190		CTRIA3	636	636	2051	2023	2024	
CQUAD4	735	735	2099	2190	2190	2190		CTRIA3	637	637	2051	2022	2023	
CQUAD4	736	736	2099	2190	2190	2190		CTRIA3	638	638	2029	2041	2027	
CQUAD4	737	737	2099	2190	2190	2190		CTRIA3	639	639	2041	2048	2027	
CQUAD4	738	738	2099	2190	2190	2190		CTRIA3	640	640	2048	2056	2027	
CQUAD4	739	739	2099	2190	2190	2190		CTRIA3	641	641	2048	2056	2027	
CQUAD4	740	740	2099	2190	2190	2190		CTRIA3	642	642	2048	2056	2027	
CQUAD4	741	741	2099	2190	2190	2190		CTRIA3	643	643	2048	2056	2027	
CQUAD4	742	742	2099	2190	2190	2190		CTRIA3	644	644	2048	2056	2027	
CQUAD4	743	743	2099	2190	2190	2190		CTRIA3	645	645	2048	2056	2027	
CQUAD4	744	744	2099	2190	2190	2190		CTRIA3	646	646	2048	2056	2027	
CQUAD4	745	745	2099	2190	2190	2190		CTRIA3	647	647	2048	2056	2027	
CQUAD4	746	746	2099	2190	2190	2190		CTRIA3	648	648	2048	2056	2027	
CQUAD4	747	747	2099	2190	2190	2190		CTRIA3	649	649	2048	2056	2027	
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CQUAD4	750	750	2099	2190	2190	2190		CTRIA3	652	652	2048	2056	2027	
CQUAD4	751	751	2099	2190	2190	2190		CTRIA3	653	653	2048	2056	2027	
CQUAD4	752	752	2099	2190	2190	2190		CTRIA3	654	654	2048	2056	2027	
CQUAD4	753	753	2099	2190	2190	2190		CTRIA3	655	655	2048	2056	2027	
CQUAD4	754	754	2099	2190	2190	2190		CTRIA3	656	656	2048	2056	2027	
CQUAD4	755	755	2099	2190	2190	2190		CTRIA3	657	657	2048	2056	2027	
CQUAD4	756	756	2099	2190	2190	2190		CTRIA3	658	658	2048	2056	2027	
CQUAD4	757	757	2099	2190	2190	2190		CTRIA3	659	659	2048	2056	2027	
CQUAD4	758	758	2099	2190	2190	2190		CTRIA3	660	660	2048	2056	2027	
CQUAD4	759	759	2099	2190	2190	2190		CTRIA3	661	661	2048	2056	2027	
CQUAD4	760	760	2099	2190	2190	2190		CTRIA3	662	662	2048	2056	2027	
CQUAD4	761	761	2099	2190	2190	2190		CTRIA3	663	663	2048	2056	2027	
CQUAD4	762	762	2099	2190	2190	2190		CTRIA3	664	664	2048	2056	2027	
CQUAD4	763	763	2099	2190	2190	2190		CTRIA3	665	665	2048	2056	2027	
CQUAD4	764	764	2099	2190	2190	2190		CTRIA3	666	666	2048	2056	2027	
CQUAD4														

*9033	361	1	- .308830E+03	*9034	*9138	358	1	0.349061E+04	*9139	
*9034	362	1	0.163581E+04	*9035	*9139	359	1	- .272521E+05	*9140	
*9035	363	1	- .934300E+04	*9036	*9140	360	1	0.153243E+04	*9141	
*9036	364	1	0.133364E+05		*9141	361	1	0.667605E+03	*9142	
DMIG	*VTAIL	367	1		*9037	*9142	362	1	- .740884E+01	*9143
*9037	357	1	0.156429E+04	*9038	*9143	363	1	- .243058E+02	*9144	
*9038	358	1	- .126722E+05	*9039	*9144	364	1	0.583973E+00	*9145	
*9039	359	1	- .249630E+02	*9040	*9145	367	1	0.194037E+04	*9146	
*9040	360	1	0.252357E+03	*9041	*9146	368	1	0.129929E+04	*9147	
*9041	361	1	0.220342E+02	*9042	*9147	369	1	0.235405E+04	*9148	
*9042	362	1	- .348368E+01	*9043	*9148	370	1	0.756407E+03	*9149	
*9043	363	1	0.213553E-02	*9044	*9149	371	1	0.771059E+02	*9150	
*9044	364	1	0.287588E+00	*9045	*9150	372	1	- .600662E+00	*9151	
*9045	365	1	0.573159E+05		*9151	373	1	0.197780E+01	*9152	
DMIG	*VTAIL	368	1		*9046	*9152	375	1	- .311505E+05	*9153
*9046	357	1	0.150006E+03	*9047	*9153	376	1	0.109246E+06		
*9047	358	1	- .349447E+04	*9048	DMIG	*VTAIL	377	1	0.317443E+03	*9154
*9048	359	1	- .184666E+05	*9049	*9154	357	1	0.219380E+04	*9155	
*9049	360	1	- .597411E+03	*9050	*9155	358	1	0.208271E+04	*9157	
*9050	361	1	0.413201E+03	*9051	*9156	359	1	- .279276E+05	*9158	
*9051	362	1	- .489900E+02	*9052	*9157	360	1	0.110130E+04	*9159	
*9052	363	1	- .271098E+00	*9053	*9158	361	1	0.550257E+03	*9160	
*9053	364	1	- .202789E+01	*9054	*9159	362	1	0.811533E+02	*9161	
*9054	365	1	- .502776E+04	*9055	*9160	363	1	- .211053E+00	*9162	
*9055	366	1	0.246725E+05		*9161	364	1	0.716540E+03	*9163	
DMIG	*VTAIL	369	1		*9162	367	1	0.171546E+04	*9164	
*9056	357	1	0.292477E+03	*9057	*9163	368	1	0.884905E+03	*9165	
*9057	358	1	0.106678E+04	*9058	*9164	369	1	0.158823E+04	*9166	
*9058	359	1	- .372974E+04	*9059	*9165	370	1	0.561757E+03	*9167	
*9059	360	1	- .163066E+05	*9060	*9166	371	1	0.690199E+02	*9168	
*9060	361	1	- .720338E+03	*9061	*9167	372	1	0.714289E+01	*9169	
*9061	362	1	0.400484E+03	*9062	*9168	373	1	0.363833E+04	*9170	
*9062	363	1	0.516836E+00	*9063	*9169	375	1	- .187741E+05	*9171	
*9063	364	1	- .141972E+02	*9064	*9170	376	1	0.775901E+05		
*9064	365	1	0.245134E+03	*9065	*9171	377	1	0.110646E+02	*9172	
*9065	366	1	- .625047E+04	*9066	DMIG	*VTAIL	378	1	0.133390E+03	*9173
*9066	367	1	0.208907E+05		*9172	357	1	0.711357E+03	*9174	
DMIG	*VTAIL	370	1		*9173	358	1	0.202839E+04	*9175	
*9067	357	1	0.109520E+02	*9068	*9174	359	1	- .261632E+05	*9177	
*9068	358	1	- .429165E+02	*9069	*9175	360	1	0.139574E+04	*9178	
*9069	359	1	0.371999E+03	*9070	*9176	361	1	0.872899E+03	*9179	
*9070	360	1	- .238343E+04	*9071	*9177	362	1	0.177372E+03	*9180	
*9071	361	1	- .117446E+05	*9072	*9178	363	1	0.741269E+02	*9181	
*9072	362	1	0.690143E+03	*9073	*9179	364	1	0.487425E+03	*9182	
*9073	363	1	0.723676E+03	*9074	*9180	367	1	0.121023E+04	*9183	
*9074	364	1	0.244021E+02	*9075	*9181	368	1	0.188910E+04	*9184	
*9075	365	1	- .5741195E+02	*9076	*9182	369	1	0.265625E+03	*9186	
*9076	366	1	0.416297E+03	*9077	*9183	370	1	0.140030E+04	*9185	
*9077	367	1	- .416404E+04	*9078	*9184	371	1	0.127903E+03	*9187	
*9078	370	1	0.192966E+05		*9185	372	1	0.237945E+03	*9188	
DMIG	*VTAIL	371	1	- .319899E+00	*9079	*9186	373	1	0.100000E+04	*9189
*9079	357	1	- .105520E+02	*9080	*9187	375	1	- .234097E+03	*9190	
*9080	358	1	0.537074E+02	*9081	*9188	376	1	0.178520E+04	*9191	
*9081	359	1	0.115046E+03	*9082	*9189	377	1	- .113866E+05	*9192	
*9082	360	1	- .455381E+03	*9083	*9190	378	1	0.701957E+05		
*9083	361	1	- .131301E+05	*9084	DMIG	*VTAIL	379	1	0.555097E+00	*9191
*9084	362	1	0.208463E+04		*9191	357	1	- .383492E+02	*9192	
*9085	363	1	- .271085E+03	*9086	*9192	358	1	0.749497E+02	*9193	
*9086	364	1	0.116824E+04	*9087	*9193	359	1	0.542347E+03	*9194	
*9087	367	1	0.123231E+02	*9088	*9194	360	1	0.295398E+04	*9195	
*9088	368	1	- .234544E+03	*9089	*9195	361	1	- .156110E+05	*9197	
*9089	369	1	0.874696E+03	*9090	*9196	362	1	0.237945E+03	*9198	
*9090	370	1	- .744486E+04	*9091	*9197	363	1	0.180000E+04	*9199	
*9091	371	1	0.300624E+05		*9198	364	1	- .853152E+01	*9200	
DMIG	*VTAIL	372	1		*9092	*9199	367	1	0.224612E+02	*9201
*9092	357	1	0.463602E+00	*9093	*9200	368	1	0.450935E+03	*9202	
*9093	358	1	- .677371E+01	*9094	*9201	369	1	0.123586E+04	*9203	
*9094	359	1	- .134083E+02	*9095	*9202	370	1	0.192022E+04	*9204	
*9095	360	1	0.576741E+02	*9096	*9203	371	1	0.747017E+03	*9205	
*9096	361	1	0.669330E+02	*9097	*9204	372	1	0.679657E+03	*9206	
*9097	362	1	- .915742E+03	*9098	*9205	373	1	0.693193E+02	*9207	
*9098	363	1	- .545493E+04	*9099	*9206	375	1	- .525747E+03	*9208	
*9099	364	1	0.116824E+04	*9100	*9207	376	1	0.193672E+04	*9209	
*9100	367	1	- .794538E+01	*9101	*9208	377	1	- .143803E+05	*9210	
*9101	368	1	0.789193E+02	*9102	*9209	378	1	0.259716E+05		
*9102	369	1	- .316023E+03	*9103	*9210	379	1	0.681648E-01	*9211	
*9103	370	1	0.187626E+04		*9211	357	1	0.121017E+01	*9213	
*9104	371	1	- .192798E+05	*9105	*9212	358	1	- .388187E+01	*9214	
*9105	372	1	0.276338B+05		*9213	359	1	0.424170E+02	*9215	
DMIG	*VTAIL	373	1		*9106	*9214	360	1	0.491571E+03	*9216
*9106	357	1	0.484957E-02	*9107	*9215	361	1	0.156462E+04	*9217	
*9107	358	1	0.440965E+00	*9108	*9216	362	1	- .188062E+05	*9218	
*9108	359	1	- .691597E+00	*9109	*9217	363	1	- .222663E+04	*9219	
*9109	360	1	- .875753E+00	*9110	*9218	364	1	0.511802E+00	*9220	
*9110	361	1	0.363362E+02	*9111	*9219	367	1	- .370708E+01	*9221	
*9111	362	1	0.411035E+01	*9112	*9220	368	1	0.222733E+02	*9222	
*9112	363	1	- .163347E+04	*9113	*9221	369	1	0.254233E+03	*9223	
*9113	364	1	- .258823E+04	*9114	*9222	370	1	0.570111E+03	*9224	
*9114	367	1	0.345739E+00	*9115	*9223	371	1	0.211878E+04	*9225	
*9115	368	1	- .422117E+01	*9116	*9224	372	1	0.303574E+03	*9226	
*9116	369	1	0.101714E+02	*9117	*9225	373	1	- .236553E+02	*9227	
*9117	370	1	- .633944E+02	*9118	*9226	375	1	- .262099E+03	*9228	
*9118	371	1	0.270474E+04	*9119	*9227	376	1	0.236420E+04	*9230	
*9119	372	1	- .730833E+04	*9120	*9228	377	1	- .100636E+05	*9231	
*9120	373	1	0.703131E+04		*9229	378	1	0.832375E+05		
DMIG	*VTAIL	375	1		*9121	*9230	379	1	- .215496E-02	*9232
*9121	357	1	- .230046E+04	*9122	*9231	380	1	- .127980E+00	*9234	
*9122	358	1	- .457159E+05	*9123	DMIG	*VTAIL	381	1	- .670087E+00	*9235
*9123	359	1	0.157355E+04	*9124	*9232	357	1	- .448327E+01	*9236	
*9124	360	1	0.126726E+04	*9125	*9233	358	1	- .502647E+02	*9237	
*9125	361	1	0.195619E+03	*9126	*9234	359	1	0.467089E+02	*9238	
*9126	362	1	- .247898E+02	*9127	*9235	360	1	0.163977E+04	*9239	
*9127	363	1	0.635440E+01	*9128	*9236	361	1	- .479445E+04	*9240	
*9128	364	1	- .784751E+00	*9129	*9237	362	1	- .110671E+00	*9241	
*9129	367	1	0.378780E+03	*9130	*9238	363	1	0.669332E+00	*9242	
*9130	368	1	- .142639E+04	*9131	*9239	364	1	- .571058E+01	*9243	
*9131	369	1	0.123205E+04	*9132	*9240	365	1	- .182164E+02	*9244	
*9132	370	1	0.216183E+03	*9133	*9241	366	1	- .460481E+02	*9245	
*9133	371	1	- .467290E+02	*9134	*9242	367	1	0.878765E+02	*9246	
*9134	372	1	0.428324E+01	*9135	*9243	370	1	0.449404E+03	*9247	
*9135	373	1	- .914807E+00	*9136	*9					

*9247	375	1	0.842499E+01	*9248	*9356	361	1	0.606719E+04	*9357	
*9248	376	1	-320128E+02	*9249	*9357	362	1	0.281741E+03	*9358	
*9249	377	1	0.773381E+02	*9250	*9358	363	1	0.117268E+03	*9359	
*9250	378	1	-617478E+03	*9251	*9359	364	1	0.195964E+02	*9360	
*9251	379	1	0.179035E+04	*9252	*9360	367	1	-.452626E+00	*9361	
*9252	380	1	-113558E+05	*9253	*9361	368	1	0.496996E+02	*9362	
*9253	381	1	0.131793E+05	*9254	*9362	369	1	0.352965E+03	*9363	
DMIG	*VTAIL	382	1	-211797E-02	*9255	*9363	370	1	-.142282E+03	*9364
*9254	357	1	0.196775E-01	*9256	*9364	371	1	0.322191E+03	*9365	
*9255	358	1	-154809E+00	*9257	*9365	372	1	0.854219E+02	*9366	
*9256	359	1	0.835219E+00	*9258	*9366	373	1	0.160192E+02	*9367	
*9257	360	1	0.461861E+01	*9259	*9367	375	1	0.323717E+03	*9368	
*9258	361	1	0.180099E+02	*9260	*9368	376	1	-.318383E+02	*9369	
*9259	362	1	0.393001E+02	*9261	*9369	377	1	-.205868E+03	*9370	
*9260	363	1	0.882424E+01	*9262	*9370	378	1	-.314870E+05	*9371	
*9261	364	1	0.813303E+03	*9263	*9371	379	1	-.699858E+03	*9372	
*9262	367	1	0.352611E+02	*9264	*9372	380	1	0.423422E+01	*9373	
*9263	368	1	-.218807E-01	*9265	*9373	381	1	0.102897E+02	*9374	
*9264	369	1	0.135616E+00	*9266	*9374	382	1	0.527409E+00	*9375	
*9265	370	1	0.447717E+01	*9267	*9375	383	1	0.337155E+01	*9376	
*9266	371	1	0.120264E+02	*9268	*9376	384	1	0.643374E+03	*9377	
*9267	372	1	0.882424E+01	*9269	*9377	385	1	-.357044E+04	*9378	
*9268	373	1	-.479232E+02	*9270	*9378	386	1	0.322247E+05	*9379	
*9269	375	1	0.117696E+00	DMIG	*VTAIL	387	1	-.338835E+00	*9380	
*9270	376	1	-.551862E+00	*9271	*9379	357	1	-.546516E+01	*9381	
*9271	377	1	0.991771E+00	*9272	*9380	358	1	0.188194E+00	*9382	
*9272	378	1	-.439420E+01	*9273	*9381	359	1	0.399533E+01	*9383	
*9273	379	1	-.139387E+03	*9274	*9382	360	1	0.777587E-02	*9384	
*9274	380	1	0.164894E+04	*9275	*9383	361	1	-.905811E-03	*9385	
*9275	381	1	-.475810E+03	*9276	*9384	362	1	0.475235E-04	*9386	
*9276	382	1	0.179643E+04	*9277	*9385	363	1	0.368288E-04	*9387	
DMIG	*VTAIL	383	1	0.311274E-03	*9278	*9387	367	1	-.149039E+01	*9388
*9277	357	1	-.479934E-02	*9279	*9388	368	1	0.885053E-01	*9389	
*9278	358	1	0.182106E-01	*9280	*9389	369	1	0.672132E-01	*9390	
*9279	359	1	-.183852E+00	*9281	*9390	370	1	0.462911E-02	*9391	
*9280	360	1	-.116182E+01	*9282	*9391	371	1	-.849053E-03	*9392	
*9281	361	1	-.255904E+01	*9283	*9392	372	1	0.795566E-04	*9393	
*9282	362	1	0.112750E+01	*9284	*9393	373	1	0.977434E-05	*9394	
*9283	363	1	-.358622E+02	*9285	*9394	375	1	-.960622E+02	*9395	
*9284	364	1	-.179107E-02	*9286	*9395	376	1	0.984160E+00	*9396	
*9285	367	1	0.109064E-01	*9287	*9396	377	1	0.481161E-01	*9397	
*9286	368	1	-.271080E+00	*9288	*9397	378	1	-.891686E-03	*9398	
*9287	369	1	-.797350E+01	*9289	*9398	379	1	-.753510E-03	*9399	
*9288	370	1	-.865236E+00	*9290	*9399	380	1	-.204675E+00	*9400	
*9289	371	1	-.258086E+01	*9291	*9400	381	1	0.508574E-05	*9401	
*9290	372	1	-.318473E+01	*9292	*9401	382	1	-.608804E-07	*9402	
*9291	373	1	-.249388E+01	*9293	*9402	383	1	0.551832E-07	*9403	
*9292	375	1	0.754849E-01	*9294	*9403	384	1	-.178513E+03	*9404	
*9293	376	1	-.271080E+00	*9295	*9404	385	1	0.105938E+04	*9405	
*9294	377	1	0.703442E+00	*9296	*9405	386	1	-.419793E+04	*9406	
*9295	378	1	-.616494E+01	*9297	*9406	387	1	0.497765E+04	*9407	
*9296	379	1	0.611220E+02	DMIG	*VTAIL	388	1	0.396140E-01	*9408	
*9297	380	1	0.131850E+04	*9298	*9407	357	1	-.884404E-01	*9409	
*9298	381	1	-.653645E+03	*9299	*9408	358	1	0.845446E+00	*9410	
*9299	382	1	-.643898E+03	*9300	*9409	359	1	-.360074E+01	*9411	
*9300	383	1	0.803030E+03	*9301	*9410	360	1	0.502871E+02	*9412	
DMIG	*VTAIL	384	1	0.265363B+05	*9302	*9411	361	1	0.250159E+03	*9413
*9301	357	1	0.292354E+05	*9303	*9412	362	1	0.874633E+04	*9414	
*9302	358	1	-.948610E+04	*9304	*9413	363	1	0.134833E+00	*9415	
*9303	359	1	-.219314E+04	*9305	*9414	364	1	0.310222E-01	*9416	
*9304	360	1	-.475010E+03	*9306	*9415	367	1	-.237634B+00	*9417	
*9306	362	1	0.553337E+02	*9307	*9416	368	1	0.235662E+01	*9418	
*9307	363	1	0.194540E+01	*9308	*9417	369	1	0.161871E+02	*9419	
*9308	364	1	-.384202E+01	*9309	*9418	370	1	0.211136E+02	*9420	
*9309	367	1	0.289832E+04	*9310	*9419	371	1	-.961292E+03	*9421	
*9310	368	1	-.116448E+04	*9311	*9420	372	1	0.278446B+03	*9422	
*9311	369	1	-.338989E+04	*9312	*9421	373	1	0.102936B+02	*9423	
*9312	370	1	-.157428E+03	*9313	*9422	375	1	-.286084E+01	*9424	
*9313	371	1	0.485381E+02	*9314	*9423	376	1	0.459790E+01	*9425	
*9314	372	1	-.926415E+01	*9315	*9424	377	1	-.225652E+02	*9426	
*9315	373	1	-.120239E+01	*9316	*9425	378	1	-.362756E+03	*9427	
*9316	375	1	-.569831E+06	*9317	*9426	379	1	-.513037E+05	*9428	
*9317	376	1	-.948471E+05	*9318	*9427	380	1	-.124016E+04	*9429	
*9318	377	1	-.370924E+04	*9319	*9428	381	1	-.303660E+04	*9430	
*9319	378	1	-.157310E+03	*9320	*9429	382	1	-.859051E+03	*9431	
*9320	379	1	0.111069E+03	*9321	*9430	383	1	0.185899E+02	*9432	
*9321	380	1	-.182494E+02	*9322	*9431	384	1	-.106061E+03	*9433	
*9322	381	1	0.664130E+01	*9323	*9432	385	1	0.590076E+03	*9434	
*9323	382	1	0.991842E+01	*9324	*9433	386	1	-.160275E+04	*9435	
*9324	383	1	0.593779E+01	*9325	*9434	387	1	0.483130E+05	*9436	
*9325	384	1	0.149748E+07	DMIG	*VTAIL	389	1	0.103213B+02	*9437	
*9326	357	1	0.710800E+01	*9327	*9436	357	1	0.166475E+01	*9438	
*9327	358	1	0.285959E+03	*9328	*9437	358	1	-.573260E+01	*9439	
*9328	359	1	-.443236E+03	*9329	*9438	359	1	-.121702E+01	*9440	
*9329	360	1	0.490161E+04	*9330	*9439	360	1	-.233661E+00	*9441	
*9330	361	1	-.323369E+03	*9331	*9440	361	1	0.275941E-01	*9442	
*9331	362	1	0.895862E+02	*9332	*9441	362	1	-.144762E-02	*9443	
*9332	363	1	-.795076E+02	*9333	*9442	363	1	-.112184E-02	*9444	
*9333	364	1	-.406666E+01	*9334	*9443	364	1	0.459398E+00	*9445	
*9334	367	1	0.952642E+02	*9335	*9444	367	1	0.269597E+01	*9446	
*9335	368	1	0.256148E+03	*9336	*9445	368	1	-.204739E+01	*9447	
*9336	369	1	0.903557E+03	*9337	*9446	369	1	-.141008E+01	*9448	
*9337	370	1	0.597779E+03	*9338	*9447	370	1	0.258631E-01	*9449	
*9338	371	1	0.124134E+03	*9339	*9448	371	1	-.242339E-02	*9450	
*9339	372	1	-.470681E+01	*9340	*9449	372	1	-.297377E-03	*9451	
*9340	373	1	-.373270E+00	*9341	*9450	373	1	0.292616E+04	*9452	
*9341	375	1	-.139221E+04	*9342	*9451	375	1	-.299786E+02	*9453	
*9342	376	1	-.419824E+03	*9343	*9452	376	1	-.146567E+01	*9454	
*9343	377	1	-.351213B+05	*9344	*9453	377	1	0.271617E-01	*9455	
*9344	378	1	-.580778E+03	*9345	*9454	378	1	0.229527E-01	*9456	
*9345	379	1	0.515640E+02	*9346	*9455	379	1	0.623463E-03	*9457	
*9346	380	1	0.268160E+01	*9347	*9456	380	1	0.185448E-03	*9458	
*9347	381	1	-.203257E+01	*9348	*9457	381	1	0.185448E-05	*9459	
*9348	382	1	-.981071E-01	*9349	*9458	382	1	-.168094E-05	*9460	
*9349	383	1	-.714582E-02	*9350	*9459	383	1	-.237751E+04	*9461	
*9350	384	1	-.269212E+04	*9351	*9460	384	1	0.187243E+04	*9462	
*9351	385	1	0.349451E+05	*9352	*9462	386	1	0.147890E+03	*9463	
*9352	357	1	0.106815E+00	*9353	*9463	387	1	0.464156E+02	*9464	
*9353	358	1	-.224760E+02	*9354	*9464	388	1	0.463955E+01	*9465	
*9354	359	1	0.196095E+03	*9355						

*9466	384	1	0.243494E+04	*9467	*9541	379	1	0.126076E+02	*9542	
*9467	385	1	-0.408017E+04	*9468	*9542	380	1	-.261081E+01	*9543	
*9468	386	1	0.137165E+04	*9469	*9543	381	1	0.555171E+00	*9544	
*9469	389	1	-0.414326E+04	*9470	*9544	382	1	0.415987E-02	*9545	
*9470	390	1	0.591447E+04		*9545	383	1	0.517604E-02	*9546	
DMIG	*VTAIL	391	1		*9471	*9546	384	1	0.106276E+05	*9547
*9471	385	1	0.137165E+04	*9472	*9547	385	1	-.226352E+02	*9548	
*9472	386	1	-0.273356E+04	*9473	*9548	386	1	0.519700E+02	*9549	
*9473	387	1	0.123460E+04	*9474	*9549	387	1	0.257476E+00	*9550	
*9474	389	1	0.729919E+02	*9475	*9550	388	1	0.673053E+00	*9551	
*9475	390	1	-.160803E+04	*9476	*9551	389	1	-.784298E+01	*9552	
*9476	391	1	0.320895E+04		*9552	406	1	0.131935E+05	*9553	
DMIG	*VTAIL	392	1		*9477	*9553	407	5	0.195301E+08	
*9477	386	1	0.123460E+04	*9478	DMIG	*VTAIL	408	1		*9587
*9478	387	1	-0.183606E+04	*9479	*9587	357	1	0.744264E+03	*9588	
*9479	388	1	0.532735E+03	*9480	*9588	358	1	0.120044E+03	*9589	
*9480	389	1	-0.270690E+02	*9481	*9589	359	1	-.413376E+03	*9590	
*9481	390	1	0.120338E+03	*9482	*9590	360	1	-.877589E+02	*9591	
*9482	391	1	-.161773E+04	*9483	*9591	361	1	-.170800E+02	*9592	
*9483	392	1	0.207529E+04		*9592	362	1	0.198980E+01	*9593	
DMIG	*VTAIL	393	1		*9484	*9593	363	1	-.104387E+00	*9594
*9484	387	1	0.571031E+03	*9485	*9594	364	1	-.808958E-01	*9595	
*9485	388	1	-0.673699E+03	*9486	*9595	367	1	0.327369E+02	*9596	
*9486	389	1	0.223540E+01	*9487	*9596	368	1	-.194405E+03	*9597	
*9487	390	1	-.993771E+01	*9488	*9597	369	1	-.147636E+03	*9598	
*9488	391	1	0.711305E+02	*9489	*9598	370	1	-.101680E+02	*9599	
*9489	392	1	-.482110E+03	*9490	*9599	371	1	0.156496E+01	*9600	
*9490	393	1	0.521340E+03		*9600	372	1	-.174749E+00	*9601	
DMIG	*VTAIL	406	1		*9491	*9601	373	1	-.214697E-01	*9602
*9491	357	1	-.173625E+05	*9492	*9602	375	1	0.211004E+06	*9603	
*9492	358	1	-.280045E+04	*9493	*9603	376	1	-.216175E+04	*9604	
*9493	359	1	0.964342E+04	*9494	*9604	377	1	-.105689E+03	*9605	
*9494	360	1	0.204728E+04	*9495	*9605	378	1	0.195682E+01	*9606	
*9495	361	1	0.398450E+03	*9496	*9606	379	1	0.165511E+01	*9607	
*9496	362	1	-.464190E+02	*9497	*9607	380	1	0.449577E-01	*9608	
*9497	363	1	0.243519E+01	*9498	*9608	381	1	-.111710E-01	*9609	
*9498	364	1	0.188718E+01	*9499	*9609	382	1	0.133726E-03	*9610	
*9499	367	1	-.763702E+03	*9500	*9610	383	1	-.121212E-03	*9611	
*9500	368	1	0.453518E+04	*9501	*9611	384	1	0.418267E+05	*9612	
*9501	369	1	0.344413E+04	*9502	*9612	385	1	0.214221E+03	*9613	
*9502	370	1	0.237204E+03	*9503	*9613	386	1	-.485492E+02	*9614	
*9503	371	1	-.435070E+02	*9504	*9614	387	1	0.145153E+02	*9615	
*9504	372	1	0.407663E+01	*9505	*9615	388	1	-.146600E+01	*9616	
*9505	373	1	0.500855E+00	*9506	*9616	389	1	-.442150E+03	*9617	
*9506	375	1	-.443406E+06	*9507	*9617	406	1	-.361691E+06	*9618	
*9507	376	1	0.504302E+05	*9508	*9618	407	5	-.565555E+03	*9619	
*9508	377	1	0.246556E+04	*9509	*9619	407	1	0.834648E+02	*9620	
*9509	378	1	-.456917E+02	*9510	*9620	408	1	0.109547E+06		
*9510	379	1	-.386113E+02	*9511	DMIG	*VTAIL	409	1		*9656
*9511	380	1	-.104880E+01	*9512	*9656	357	1	-.262206E+05	*9657	
*9512	381	1	0.260603E+00	*9513	*9657	358	1	-.103588E+04	*9658	
*9513	382	1	-.311963E-02	*9514	*9658	359	1	0.214164E+04	*9659	
*9514	383	1	0.282769E-02	*9515	*9659	360	1	0.293513E+03	*9660	
*9515	384	1	-.968348E+06	*9516	*9660	361	1	0.269486E+02	*9661	
*9516	385	1	0.197004E+04	*9517	*9661	362	1	-.242484E+01	*9662	
*9517	386	1	-.358031E+03	*9518	*9662	363	1	0.525678E-01	*9663	
*9518	387	1	0.100278E+03	*9519	*9663	364	1	0.172746E+00	*9664	
*9519	388	1	-.101088E+02	*9520	*9664	367	1	0.323348E+04	*9665	
*9520	389	1	-.305457E+04	*9521	*9665	368	1	0.215706E+04	*9666	
*9521	406	1	0.176490E+07		*9666	369	1	0.503979E+03	*9667	
DMIG	*VTAIL	407	1		*9522	*9667	370	1	0.246870E+02	*9668
*9524	357	1	-.911903E+05	*9525	*9668	371	1	-.255333E+01	*9669	
*9525	358	1	0.728130E+04	*9526	*9669	372	1	0.824261E+00	*9670	
*9526	359	1	0.231467E+03	*9527	*9670	373	1	0.127325E-01	*9671	
*9527	360	1	-.841305E+02	*9528	*9671	375	1	-.458756E+05	*9672	
*9528	361	1	0.529257E+01	*9529	*9672	376	1	0.207304E+03	*9673	
*9529	362	1	-.984070E+00	*9530	*9673	377	1	0.280582E+02	*9674	
*9530	363	1	0.155806E+00	*9531	*9674	378	1	-.203798E+02	*9675	
*9531	364	1	0.153670E-01	*9532	*9675	379	1	-.339806E+01	*9676	
*9532	367	1	-.501667E+05	*9533	*9676	390	1	-.120555E+00	*9677	
*9533	368	1	0.663999E+03	*9534	*9677	391	1	0.420144E-01	*9678	
*9534	369	1	-.918211E+02	*9535	*9678	392	1	0.823926E-04	*9679	
*9535	370	1	-.938795E+00	*9536	*9679	393	1	0.414972E-03	*9680	
*9536	371	1	0.891667E+00	*9537	*9680	394	1	0.520328E+05	*9681	
*9537	372	1	-.955200E+00	*9538	*9681	395	1	0.124228E+01	*9682	
*9538	373	1	0.604210E-01	*9539	*9682	396	1	-.178476E+01	*9683	
*9539	375	1	-.290253E+04	*9540	*9683	397	1	-.785608E+00	*9684	
*9540	376	1	0.464443E+03	*9541	*9684	398	1	0.666356E-01	*9685	
*9541	377	1	0.509231E+02	*9542	*9685	399	1	0.239304E+02	*9686	
*9542	378	1	0.925670E+00	*9543	*9686	406	5	-.402560E+05	*9687	
*9543	379	1	0.568770E+00	*9544	*9687	407	5	0.438355E+05	*9688	
*9544	380	1	-.965196E-01	*9545	*9688	407	1	0.785184E+04	*9689	
*9545	381	1	0.253072E-01	*9546	*9689	408	1	0.172562E+04	*9690	
*9546	382	1	0.225246E-03	*9547	*9690	409	5	0.179613E+06	*9691	
*9547	383	1	0.233053E-03	*9548	*9691	409	1	0.431661E+05		
*9548	384	1	0.675815E+04	*9549	DMIG	*VTAIL	409	5		*9621
*9549	385	1	-.939438E+00	*9550	*9621	357	1	-.108056E+06	*9622	
*9550	386	1	0.715953E+00	*9551	*9622	358	1	-.369272E+04	*9623	
*9551	387	1	-.377998E-01	*9552	*9623	359	1	-.168866E+05	*9624	
*9552	388	1	0.102272E-01	*9553	*9624	360	1	-.236393E+04	*9625	
*9553	389	1	0.115747E+01	*9554	*9625	361	1	-.229630E+03	*9626	
*9554	406	1	-.194711E+04	*9555	*9626	362	1	0.221145E+02	*9627	
*9555	407	5	0.676867E+06	*9556	*9627	363	1	-.744120E+00	*9628	
*9556	407	1	0.122983E+06	*9557	*9628	364	1	-.145670E+01	*9629	
*9557	407	1		*9558	*9629	367	1	-.615575E+04	*9630	
*9558	407	1		*9559	*9630	368	1	-.153980E+05	*9631	
*9559	407	1		*9560	*9631	369	1	-.392419E+04	*9632	
*9560	407	1		*9561	*9632	370	1	-.182427E+03	*9633	
*9561	407	1		*9562	*9633	371	1	0.179957E+02	*9634	
*9562	407	1		*9563	*9634	372	1	-.376324E+01	*9635	
*9563	407	1		*9564	*9635	373	1	-.241942E+00	*9636	
*9564	407	1		*9565	*9636	375	1	-.145521E+06	*9637	
*9565	407	1		*9566	*9637	376	1	-.194645E+04	*9638	
*9566	407	1		*9567	*9638	377	1	-.813680E+03	*9639	
*9567	407	1		*9568	*9639	378	1	0.145115E+03	*9640	
*9568	407	1		*9569	*9640	379	1	0.267615E+02	*9641	
*9569	407	1		*9570	*9641	380	1	0.128492E+01	*9642	
*9570	407	1		*9571	*9642	381	1	-.454159E+00	*9643	
*9571	407	1		*9572	*9643	382	1	-.347133E-02	*9644	
*9572	407	1		*9573	*9644	383	1	-.417601E-02	*9645	
*9573	407	1		*9574	*9645	384	1	-.184205E+06	*9646	
*9574	407	1		*9575	*9646	385	1	-.595504E+02	*9647	
*9575	407	1		*9576	*9647	386	1	0.		

*9649	388	1	-4328895e+00	*9650	GRID	108	0	-139.738-404.997.000	0	
*9650	389	1	-153385E+03	*9651	GRID	109	0	-128.703-404.537.000	0	
*9651	406	1	0.258026E+06	*9652	GRID	110	0	-108.954-403.714.000	0	
*9652	407	5	0.882856E+05	*9653	GRID	111	0	-83.248-402.642.000	0	
*9653	407	1	0.627816E+05	*9654	GRID	112	0	-53.008-401.381.000	0	
*9654	408	1	-1106065E+05	*9655	GRID	113	0	-41.500-400.902.000	0	
*9655	409	5	0.437093E+07	+EIG1	GRID	114	0	-41.500-417.400.000	0	
EIG1	1	MGIV	0.	30.	+EIG1	GRID	115	0	-25.500-417.400.000	0
+EIG1	MAX				GRID	116	0	-25.500-417.400.000	0	
GRID	1	5	-136.6059.331 .000	0	GRID	117	0	.000 -417.40 .000	0	
GRID	2	5	-131.7509.602 .000	0	GRID	118	0	-39.431 -373.800.000	0	
GRID	3	5	-100.75011.331 .000	0	GRID	119	0	-36.792 -377.878.000	7	
GRID	4	5	-75.750 12.72 .000	0	GRID	120	0	-32.604 -417.400.000	0	
GRID	5	5	-40.750 14.678 .000	0	GRID	121	0	-41.500 -373.800.000	0	
GRID	6	5	0.000 17.047 .000	0	GRID	122	0	-120.926-390.747.000	0	
GRID	7	5	24.947 18.341 .000	0	GRID	123	0	-101.524-387.707.000	0	
GRID	8	5	-141.0943.076 .000	0	GRID	124	0	-70.415 -382.833.000	0	
GRID	9	0	-170.615-371.062.000	5	GRID	125	0	-120.235-395.153.000	0	
GRID	10	5	-100.7503.353 .000	0	GRID	126	0	-100.719-392.843.000	0	
GRID	11	0	-145.429-352.988.000	5	GRID	127	0	-69.427 -389.140.000	0	
GRID	12	5	-75.750 3.524 .000	0	GRID	128	0	-119.530-399.653.000	0	
GRID	13	0	-125.118-338.412.000	5	GRID	129	0	-99.898 -398.082.000	0	
GRID	14	5	-40.750 3.763 .000	0	GRID	130	0	-68.420 -395.564.000	0	
GRID	15	0	-96.682 -318.006.000	5	GRID	131	0	-118.830-404.125.000	0	
GRID	16	5	0.000 4.054 .000	0	GRID	132	0	-99.081 -403.302.000	0	
GRID	17	0	-63.570-294.247.000	5	GRID	133	0	-67.414 -401.982.000	0	
GRID	18	5	14.758 4.143 .000	0	GRID	134	0	-139.738-394.695.000	7	
GRID	19	0	-180.000-381.378.000	0	GRID	135	0	-130.473-393.243.000	7	
GRID	20	0	-168.385-374.169.000	1	GRID	136	0	-120.773-391.723.000	7	
GRID	21	0	-157.000-366.154.000	0	GRID	137	0	-111.071-390.203.000	7	
GRID	22	0	-147.640-359.565.000	0	GRID	138	0	-101.371-380.683.000	7	
GRID	23	0	-143.025-356.324.000	1	GRID	139	0	-85.817 -386.246.000	7	
GRID	24	0	-139.738-354.003.000	0	GRID	140	0	-70.262 -383.809.000	7	
GRID	25	0	-122.591-341.932.000	1	GRID	141	0	-53.000 -381.104.000	7	
GRID	26	0	-120.000-340.108.000	0	GRID	142	0	-41.500 -379.302.000	7	
GRID	27	0	-93.970 -321.785.000	1	GRID	143	0	-180.000-389.378.000	0	
GRID	29	0	-86.000 -316.174.000	0	GRID	153	0	.000 -100.00 .000	0	
GRID	30	0	-60.647 -298.327.000	1	GRID	154	0	.000 -160.00 .000	0	
GRID	31	0	-41.500 -293.800.000	0	GRID	155	0	.000 -200.00 .000	0	
GRID	32	0	-54.210 -293.800.000	0	GRID	156	0	.000 -252.50 .000	0	
GRID	33	0	-41.500 -293.800.000	0	GRID	163	0	.000 -60.00 .000	0	
GRID	34	0	-25.500 -293.800.000	0	GRID	164	0	.000 -78.80 .000	0	
GRID	35	0	-25.500 -293.800.000	0	GRID	173	5	-116.25010.466 .000	0	
GRID	36	0	.000 -293.80 .000	0	GRID	174	5	-88.250 12.029 .000	0	
GRID	37	0	-41.500 -308.500.000	0	GRID	175	5	-58.250 13.701 .000	0	
GRID	38	0	-54.216 -310.784.000	0	GRID	176	5	-19.500 15.863 .000	0	
GRID	39	0	-41.500 -308.500.000	0	GRID	177	5	-116.2503.247 .000	0	
GRID	40	0	-25.500 -308.500.000	0	GRID	178	5	-88.250 3.438 .000	0	
GRID	41	0	-25.500 -308.500.000	0	GRID	179	5	-58.250 3.643 .000	0	
GRID	42	0	.000 -308.50 .000	0	GRID	180	5	-19.500 3.908 .000	0	
GRID	44	0	-86.000 -332.494.000	0	GRID	181	0	-71.000 -305.615.000	0	
GRID	45	0	-41.500 -324.500.000	0	GRID	182	0	-71.000 -313.799.000	0	
GRID	46	0	-54.216 -326.784.000	0	GRID	183	0	-71.000 -329.799.000	0	
GRID	47	0	-41.500 -324.500.000	0	GRID	184	0	-71.000 -345.799.000	0	
GRID	48	0	-25.500 -324.500.000	0	GRID	185	0	-71.000 -361.799.000	0	
GRID	49	0	-25.500 -324.500.000	0	GRID	186	0	-71.000 -379.099.000	7	
GRID	50	0	.000 -324.50 .000	0	GRID	187	0	-102.000-327.437.000	0	
GRID	51	0	-139.738-358.146.000	0	GRID	188	0	-102.000-335.367.000	0	
GRID	52	0	-120.000-354.601.000	0	GRID	189	0	-102.000-351.367.000	0	
GRID	53	0	-86.000 -348.494.000	0	GRID	190	0	-102.000-367.367.000	0	
GRID	54	0	-41.500 -340.500.000	0	GRID	191	0	-102.000-384.667.000	7	
GRID	55	0	-54.216 -342.784.000	0	GRID	192	0	-131.000-347.852.000	0	
GRID	56	0	-41.500 -340.500.000	0	GRID	193	0	-131.000-356.576.000	0	
GRID	57	0	-25.500 -340.500.000	0	GRID	194	5	-131.7503.141 .000	0	
GRID	58	0	-25.500 -340.500.000	0	GRID	195	0	.000 -385.600.000	0	
GRID	59	0	.000 -340.50 .000	0	GRID	196	0	.000 -447.000.000	0	
GRID	60	0	-168.385-379.292.000	0	GRID	233	0	-41.500 -497.500.000	0	
GRID	61	0	-157.000-377.247.000	0	GRID	241	0	-31.810 -497.500.000	0	
GRID	62	0	-139.738-374.146.000	0	GRID	242	0	-168.385-387.292.000	0	
GRID	63	0	-131.000-372.576.000	0	GRID	243	0	-157.000-385.247.000	0	
GRID	64	0	-120.000-370.601.000	0	GRID	244	0	-139.738-382.146.000	0	
GRID	65	0	-86.000 -364.494.000	0	GRID	245	0	-131.000-380.576.000	0	
GRID	66	0	-41.500 -356.500.000	0	GRID	251	0	-41.500 -463.0520.0	0	
GRID	67	0	-54.216 -358.784.000	0	GRID	252	0	-67.903 -482.9730.0	0	
GRID	68	0	-41.500 -356.500.000	0	GRID	253	0	-81.403 -493.1590.0	0	
GRID	69	0	-25.500 -356.500.000	0	GRID	254	0	-92.653 -501.6460.0	0	
GRID	70	0	-25.500 -356.500.000	0	GRID	255	0	-103.085-509.5170.0	0	
GRID	71	0	.000 -356.50 .000	0	GRID	256	0	-110.127-514.8300.0	0	
GRID	72	0	-180.000-398.678.000	0	GRID	257	0	-57.952 -504.9420.0	0	
GRID	73	0	-168.385-396.592.000	0	GRID	258	0	-72.294 -513.2610.0	0	
GRID	74	0	-157.000-394.547.000	0	GRID	259	0	-84.253 -520.1930.0	0	
GRID	75	0	-139.738-391.416.000	0	GRID	260	0	-95.338 -526.6210.0	0	
GRID	76	0	-131.000-389.876.000	7	GRID	261	0	-110.127-535.1970.0	0	
GRID	77	0	-120.000-387.901.000	0	GRID	262	0	-41.500 -541.2650.0	0	
GRID	78	0	-86.000 -381.794.000	0	GRID	263	0	-59.060 -542.4880.0	0	
GRID	79	0	-29.250 -417.400.000	0	GRID	264	0	-73.693 -543.5080.0	0	
GRID	80	0	-54.216 -376.084.000	0	GRID	265	0	-87.261 -544.4530.0	0	
GRID	81	0	-41.500 -373.800.000	7	GRID	266	0	-102.862-545.5400.0	0	
GRID	82	0	-25.500 -373.800.000	0	GRID	267	0	.000 -153.25 .000	0	
GRID	83	0	-25.500 -373.800.000	0	GRID	268	0	.000 -276.42 .000	0	
GRID	84	0	.000 -373.80 .000	0	GRID	271	0	-36.000 -469.194.000	0	
GRID	85	0	-180.000-406.675.000	0	GRID	272	0	-36.000 -497.500.000	0	
GRID	86	0	-168.385-406.191.000	0	GRID	273	0	-29.250 -497.500.000	0	
GRID	87	0	-157.000-405.717.000	0	GRID	274	0	-40.750 -497.500.000	0	
GRID	88	0	-139.738-404.997.000	0	GRID	275	0	-40.750 -479.550.000	0	
GRID	89	0	-139.738-393.695.000	0	GRID	276	0	-29.250 -479.550.000	0	
GRID	90	0	-130.626-392.267.000	0	GRID	277	0	-29.250 -479.550.000	0	
GRID	91	0	-111.224-389.227.000	0	GRID	278	0	-40.750 -469.194.000	0	
GRID	92	0	-85.970 -385.270.000	0	GRID	279	0	-29.250 -469.194.000	0	
GRID	93	0	-53.000 -380.104.000	0	GRID	280	0	-40.750 -462.820.000	0	
GRID	94	0	-29.250 -373.800.000	0	GRID	281	0	.000 -479.55 .000	0	
GRID	95	0	-41.500 -378.302.000	0	GRID	282	0	.000 -462.82 .000	0	
GRID	96	0	-139.738-397.61.000	0	GRID	283	0	.000 -446.10 .000	0	
GRID	97	0	-129.992-396.307.000	0	GRID	284	0	.000 -447.00 .000	0	
GRID	98	0	-110.476-393.998.000	0	GRID	285	0	.000 -424.00 .000	0	
GRID	99	0	-85.073 -390.992.000	0	GRID	286	0	.000 -403.00 .000	0	
GRID	100	0	-53.000 -387.196.000	0	GRID	290	0	-29.250 -462.820.000	0	
GRID	101	0	-41.500 -385.835.000	0	GRID	291	0	-29.250 -462.820.000	0	
GRID	102	0	-139.738-401.269.000	0	GRID	292	0	-40.750 -446.100.000	0	
GRID	103	0	-129.345-400.438.000	0	GRID	293	0	-29.250 -446.100.000	0	
GRID	104	0	-109.713-398.867.000	0	GRID	294	0</			

GRID	299	0	-33.570	-497.500.000	0		GRID	1047	0	-41.500	-324.5002.944	0
GRID	300	0	-19.000	-417.400.000	0		GRID	1048	0	-25.500	-324.50010.350	0
GRID	357	0	.000	-452.61825.500	0		GRID	1051	0	-139.738-358.1461.446	0	
GRID	358	0	.000	-469.42445.000	0		GRID	1052	0	-120.000-354.6011.763	0	
GRID	359	0	.000	-484.34962.317	0		GRID	1053	0	-86.000 -348.4942.112	0	
GRID	360	0	.000	-501.18481.850	0		GRID	1054	0	-41.500 -340.5005.450	0	
GRID	361	0	.000	-518.008101.371	0		GRID	1055	0	-54.216 -342.7842.426	0	
GRID	362	0	.000	-527.582112.479	0		GRID	1056	0	-41.500 -340.5002.598	0	
GRID	363	0	.000	-534.495120.500	0		GRID	1057	0	-25.500 -340.50010.750	0	
GRID	364	0	.000	-538.374125.000	0		GRID	1060	0	-168.385-379.292.984	0	
GRID	367	0	.000	-446.10044.849	0		GRID	1061	0	-157.000-377.2471.108	0	
GRID	368	0	.000	-472.31270.354	0		GRID	1062	0	-139.738-374.1461.256	0	
GRID	369	0	.000	-491.06888.605	0		GRID	1063	0	-131.000-372.5761.328	0	
GRID	370	0	.000	-509.812106.844	0		GRID	1064	0	-120.000-370.6011.418	0	
GRID	371	0	.000	-520.479117.222	0		GRID	1065	0	-86.000 -364.4941.676	0	
GRID	372	0	.000	-523.847120.500	0		GRID	1066	0	-41.500 -356.5005.800	0	
GRID	373	0	.000	-528.472125.000	0		GRID	1067	0	-54.216 -358.7841.908	0	
GRID	375	0	.000	-492.59445.000	0		GRID	1068	0	-41.500 -356.5002.028	0	
GRID	376	0	.000	-498.20753.064	0		GRID	1069	0	-25.500 -356.50010.950	0	
GRID	377	0	.000	-512.83174.074	0		GRID	1072	0	-180.000-398.678.330	0	
GRID	378	0	.000	-527.44695.070	0		GRID	1073	0	-168.385-396.592.415	0	
GRID	379	0	.000	-535.762107.018	0		GRID	1074	0	-157.000-394.547.508	0	
GRID	380	0	.000	-545.147120.500	0		GRID	1075	0	-139.738-391.446.645	0	
GRID	381	0	.000	-548.279125.000	0		GRID	1076	0	-131.000-389.876.706	7	
GRID	382	0	.000	-560.736120.500	0		GRID	1077	0	-120.000-387.901.796	0	
GRID	383	0	.000	-563.088125.000	0		GRID	1078	0	-86.000 -381.7941.039	0	
GRID	384	0	.000	-498.05345.000	0		GRID	1079	0	-29.250 -417.4009.000	0	
GRID	385	0	.000	-516.03771.933	0		GRID	1080	0	-54.216 -376.0841.264	0	
GRID	386	0	.000	-530.24093.204	0		GRID	1081	0	-41.500 -373.80011.364	7	
GRID	387	0	.000	-538.321105.309	0		GRID	1082	0	-25.500 -373.80011.100	0	
GRID	388	0	.000	-548.465120.500	0		GRID	1085	0	-180.000-406.675.075	0	
GRID	389	0	.000	-521.28945.000	0		GRID	1086	0	-168.385-406.191.090	0	
GRID	390	0	.000	-530.36462.367	0		GRID	1087	0	-157.000-405.717.115	0	
GRID	391	0	.000	-542.27685.168	0		GRID	1088	0	-139.738-404.997.145	0	
GRID	392	0	.000	-549.05598.142	0		GRID	1094	0	-29.250 -373.8009.000	0	
GRID	393	0	.000	-560.736120.500	0		GRID	1096	0	-139.738-397.461.429	0	
GRID	405	0	.000	-500.000	0		GRID	1097	0	-129.992-396.307.471	0	
GRID	406	0	.000	-498.24941.224	0		GRID	1098	0	-110.476-393.998.557	0	
GRID	407	0	.000	-446.10025.500	0		GRID	1099	0	-85.073 -390.992.669	0	
GRID	408	0	.000	-509.89233.450	0		GRID	1100	0	-53.000 -387.196.810	0	
GRID	409	0	.000	-479.02125.500	0		GRID	1101	0	-41.500 -385.8352.659	0	
GRID	410	0	.000	-426.400	0		GRID	1102	0	-139.738-401.269.288	0	
GRID	431	0	.000	-351.70	0		GRID	1103	0	-129.345-400.438.318	0	
GRID	437	0	.000	-325.40	0		GRID	1104	0	-109.713-398.867.377	0	
GRID	458	0	.000	-266.92	0		GRID	1105	0	-84.160 -396.823.453	0	
GRID	459	0	.000	-274.55	0		GRID	1106	0	-53.000 -394.330.545	0	
GRID	464	0	-29.250	-492.500.000	0		GRID	1107	0	-41.500 -393.4101.787	0	
GRID	465	0	-40.750	-192.500.000	0		GRID	1108	0	-139.738-404.997.150	0	
GRID	466	0	-29.250	-502.250.000	0		GRID	1109	0	-128.703-404.537.167	0	
GRID	467	0	-40.750	-502.250.000	0		GRID	1110	0	-108.954 -403.714.198	0	
GRID	501	0	-54.702	-473.0130.	0		GRID	1111	0	-83.248 -402.642.238	0	
GRID	502	0	-74.653	-488.0660.	0		GRID	1112	0	-53.000 -401.381.285	0	
GRID	503	0	-87.028	-497.4020.	0		GRID	1113	0	-41.500 -400.902.925	0	
GRID	504	0	-97.869	-505.5820.	0		GRID	1114	0	-41.500 -417.4009.000	0	
GRID	505	0	-106.606	-512.1740.	0		GRID	1121	0	-41.500 -373.8005.850	0	
GRID	506	0	-41.5	-480.2760.	0		GRID	1125	0	-120.235-395.153.514	0	
GRID	507	0	-62.928	-493.9580.	0		GRID	1126	0	-100.719-392.843.669	0	
GRID	508	0	-76.851	-503.2100.	0		GRID	1127	0	-69.427 -389.110.737	0	
GRID	509	0	-88.453	-510.9200.	0		GRID	1128	0	-119.530-399.663.348	0	
GRID	510	0	-99.212	-518.0690.	0		GRID	1129	0	-99.898 -398.082.406	0	
GRID	511	0	-110.127	-525.0140.	0		GRID	1130	0	-68.420 -395.564.500	0	
GRID	512	0	-49.726	-501.2210.	0		GRID	1131	0	-118.830-404.125.182	0	
GRID	513	0	-65.126	-509.1020.	0		GRID	1132	0	-99.081 -403.302.213	0	
GRID	514	0	-78.276	-516.7270.	0		GRID	1133	0	-67.414 -401.982.263	0	
GRID	515	0	-89.796	-523.4070.	0		GRID	1134	0	-139.738-394.695.531	7	
GRID	516	0	-102.733	-530.9090.	0		GRID	1135	0	-130.473-393.243.585	7	
GRID	517	0	-41.5	-519.3830.	0		GRID	1136	0	-120.773-391.723.641	7	
GRID	518	0	-49.726	-523.1040.	0		GRID	1137	0	-111.071-390.203.697	7	
GRID	519	0	-65.680	-527.8750.	0		GRID	1138	0	-101.371-388.683.754	7	
GRID	520	0	-78.973	-531.8050.	0		GRID	1139	0	-85.817 -386.216.844	7	
GRID	521	0	-91.3	-535.5370.	0		GRID	1140	0	-70.262 -383.809.938	7	
GRID	522	0	-106.495	-540.3680.	0		GRID	1141	0	-53.000 -381.1041.050	7	
GRID	523	0	-50.28	-541.8760.	0		GRID	1142	0	-41.500 -379.3023.412	7	
GRID	524	0	-66.376	-542.9980.	0		GRID	1143	0	-180.000-389.378.675	0	
GRID	525	0	-80.477	-544.0080.	0		GRID	1173	5	-116.25010.466 .453	0	
GRID	526	0	-95.062	-544.9960.	0		GRID	1174	5	-88.250 12.029 .640	0	
GRID	701	3	0.	0.	0.		GRID	1175	5	-58.250 13.701 .795	0	
GRID	702	3	100.	0.	0.		GRID	1176	5	-19.500 15.863 1.015	0	
GRID	703	3	0.	0.	-100.		GRID	1177	5	-116.2503.247 .990	0	
GRID	1001	5	-136.6059.331	.355	0		GRID	1178	5	-88.250 3.438 1.303	0	
GRID	1002	5	-131.7509.602	.382	0		GRID	1179	5	-58.250 3.643 1.590	0	
GRID	1003	5	-100.7501.331	.560	0		GRID	1180	5	-19.500 3.903 1.980	0	
GRID	1004	5	-75.750	12.725	.700		GRID	1181	0	-71.000 -305.6152.359	0	
GRID	1005	5	-40.750	14.678	.895		GRID	1182	0	-71.000 -313.7992.486	0	
GRID	1006	5	0.000	17.047	1.115		GRID	1183	0	-71.000 -329.7992.524	0	
GRID	1007	5	24.947	18.341	1.245		GRID	1184	0	-71.000 -345.7992.242	0	
GRID	1008	5	-141.10943.076	.845	0		GRID	1185	0	-71.000 -361.7991.776	0	
GRID	1010	5	-100.7503.353	1.150	0		GRID	1186	0	-71.000 -379.0991.138	7	
GRID	1012	5	-75.750	3.524	1.410		GRID	1187	0	-102.000-327.4371.904	0	
GRID	1014	5	-40.750	3.763	1.765		GRID	1188	0	-102.000-335.3672.032	0	
GRID	1016	5	0.000	4.054	2.190		GRID	1189	0	-102.000-351.3671.954	0	
GRID	1018	5	14.758	4.143	2.080		GRID	1190	0	-102.000-367.3671.559	0	
GRID	1019	0	-180.000	-381.378	.790		GRID	1191	0	-102.000-384.667.924	7	
GRID	1020	0	-169.385	-374.169	.965		GRID	1192	0	-131.000-347.8521.517	0	
GRID	1021	0	-157.000	-366.1541.156	0		GRID	1193	0	-131.000-356.5761.617	0	
GRID	1022	0	-147.640	-359.5651.284	0		GRID	1194	5	-131.7503.14 .875	0	
GRID	1023	0	-143.035	-356.3241.358	1		GRID	1233	0	-41.500 -497.5002.790	0	
GRID	1024	0	-139.738	-354.0031.400	0		GRID	1242	0	-168.385-387.292.764	0	
GRID	1025	0	-122.591	-341.9321.635	1		GRID	1243	0	-157.000-385.247.862	0	
GRID	1026	0	-120.000	-340.1081.663	0		GRID	1244	0	-139.738-382.1461.004	0	
GRID	1027	0	-93.970	-321.7								

GRID	1264	0	-73.693	-543.508.531	0		GRID	2101	0	-41.500	-385.835-2.659	0	
GRID	1265	0	-87.261	-544.453.399	0		GRID	2102	0	-139.730	-401.269-2.288	0	
GRID	1266	0	-102.862	-545.540.248	0		GRID	2103	0	-129.345	-400.438-2.318	0	
GRID	1275	0	-40.750	-479.5505.000	0		GRID	2104	0	-109.713	-398.867-2.377	0	
GRID	1276	0	-29.250	-479.5506.150	0		GRID	2105	0	-84.160	-396.823-2.453	0	
GRID	1280	0	-40.750	-462.8205.500	0		GRID	2106	0	-53.000	-394.330-2.545	0	
GRID	1290	0	-29.250	-462.8207.000	0		GRID	2107	0	-41.500	-393.410-2.1787	0	
GRID	1292	0	-40.750	-446.1005.650	0		GRID	2108	0	-139.738	-404.997-2.150	0	
GRID	1293	0	-29.250	-446.1007.000	0		GRID	2109	0	-128.703	-404.537-2.167	0	
GRID	1464	0	-29.250	-492.5004.500	0		GRID	2110	0	-108.954	-403.714-2.198	0	
GRID	1465	0	-40.750	-492.5004.750	0		GRID	2111	0	-83.248	-402.642-2.238	0	
GRID	1466	0	-29.250	-502.2503.000	0		GRID	2112	0	-53.000	-401.381-2.285	0	
GRID	1467	0	-40.750	-502.2504.250	0		GRID	2113	0	-41.500	-400.902-2.925	0	
GRID	1501	0	-54.702	-473.0130.868	0		GRID	2114	0	-41.500	-417.400-2.900	0	
GRID	1502	0	-74.653	-488.0660.638	0		GRID	2121	0	-41.500	-373.800-2.850	0	
GRID	1503	0	-87.028	-497.4020.495	0		GRID	2125	0	-120.235	-395.153-2.514	0	
GRID	1504	0	-97.869	-505.5820.370	0		GRID	2126	0	-100.719	-392.843-2.669	0	
GRID	1505	0	-106.606	-512.1740.268	0		GRID	2127	0	-69.427	-389.140-2.737	0	
GRID	1506	0	-41.5	-480.2761.906	0		GRID	2128	0	-119.530	-399.653-2.348	0	
GRID	1507	0	-62.928	-493.9581.610	0		GRID	2129	0	-99.899	-398.082-2.406	0	
GRID	1508	0	-76.851	-503.2101.180	0		GRID	2130	0	-68.420	-395.564-2.500	0	
GRID	1509	0	-88.453	-510.9200.934	0		GRID	2131	0	-118.830	-404.125-2.182	0	
GRID	1510	0	-99.212	-518.0690.700	0		GRID	2132	0	-99.081	-403.302-2.213	0	
GRID	1511	0	-110.127	-525.0140.417	0		GRID	2133	0	-67.414	-401.982-2.263	0	
GRID	1512	0	-49.726	-501.2212.646	0		GRID	2134	0	-139.738	-394.695-2.531	7	
GRID	1513	0	-65.126	-509.1022.152	0		GRID	2135	0	-130.473	-393.243-2.585	7	
GRID	1514	0	-78.276	-516.7271.619	0		GRID	2136	0	-120.773	-391.723-2.641	7	
GRID	1515	0	-89.796	-523.4071.264	0		GRID	2137	0	-111.071	-390.203-2.697	7	
GRID	1516	0	-102.733	-530.9090.848	0		GRID	2138	0	-101.371	-388.683-2.754	7	
GRID	1517	0	-41.5	-519.3831.812	0		GRID	2139	0	-85.817	-386.246-2.844	7	
GRID	1518	0	-49.726	-523.1041.668	0		GRID	2140	0	-70.262	-383.809-2.934	7	
GRID	1519	0	-65.680	-527.8751.236	0		GRID	2141	0	-53.000	-381.104-2.1050	7	
GRID	1520	0	-78.973	-531.8050.984	0		GRID	2142	0	-41.500	-379.302-3.412	7	
GRID	1521	0	-91.3	-535.5370.745	0		GRID	2143	0	-180.000	-389.378-2.675	0	
GRID	1522	0	-106.495	-540.3680.427	0		GRID	2173	5	-116.25010.465	-2.453	0	
GRID	1523	0	-50.28	-541.8760.752	0		GRID	2174	5	-88.250	12.029	-0.640	0
GRID	1524	0	-66.376	-542.9980.600	0		GRID	2175	5	-58.250	13.701	-0.795	0
GRID	1525	0	-80.477	-544.0080.465	0		GRID	2176	5	-19.500	15.863	-1.015	0
GRID	1526	0	-95.062	-544.9980.324	0		GRID	2177	5	-116.2503.247	-0.990	0	
GRID	2001	5	-136.6059.331	-0.355	0		GRID	2178	5	-88.250	3.438	-1.303	0
GRID	2002	5	-131.7509.602	-0.382	0		GRID	2179	5	-58.250	3.643	-1.590	0
GRID	2003	5	-100.75011.331	-0.560	0		GRID	2180	5	-19.500	3.908	-1.980	0
GRID	2004	5	-75.750	12.725	-0.700		GRID	2181	0	-71.000	-305.615-2.359	0	
GRID	2005	5	-40.750	14.678	-0.895		GRID	2182	0	-71.000	-313.799-2.486	0	
GRID	2006	5	0.000	17.047	-1.115		GRID	2183	0	-71.000	-329.799-2.524	0	
GRID	2007	5	24.947	18.341	-1.245		GRID	2184	0	-71.000	-345.799-2.242	0	
GRID	2009	5	-141.0943.076	-0.845	0		GRID	2185	0	-71.000	-361.799-1.776	0	
GRID	2010	5	-100.7503.353	-1.150	0		GRID	2186	0	-71.000	-379.099-1.138	7	
GRID	2012	5	-75.750	3.524	-1.410		GRID	2187	0	-102.000	-327.437-1.904	0	
GRID	2014	5	-40.750	3.763	-1.765		GRID	2188	0	-102.000	-335.367-2.032	0	
GRID	2016	5	0.000	4.054	-2.190		GRID	2189	0	-102.000	-351.367-1.954	0	
GRID	2018	5	14.758	4.143	-2.080		GRID	2190	0	-102.000	-367.367-1.559	0	
GRID	2019	5	-180.000	-381.378-2.790	0		GRID	2191	0	-102.000	-384.667-2.924	7	
GRID	2020	5	-168.385	-374.169-2.965	1		GRID	2192	0	-131.000	-347.852-1.517	0	
GRID	2021	0	-157.000	-366.154-2.156	0		GRID	2193	0	-131.000	-356.576-1.617	0	
GRID	2022	0	-147.640	-359.565-1.284	0		GRID	2194	5	-131.7503.141	-0.875	0	
GRID	2023	0	-143.035	-356.324-1.358	1		GRID	2233	0	-41.500	-497.500-2.790	0	
GRID	2024	0	-139.738	-354.003-1.400	0		GRID	2242	0	-168.385	-387.292-2.764	0	
GRID	2025	0	-122.591	-341.932-1.635	1		GRID	2243	0	-157.000	-385.247-2.862	0	
GRID	2026	0	-120.000	-340.108-1.663	0		GRID	2244	0	-139.738	-382.146-1.004	0	
GRID	2027	0	-93.970	-321.785-2.018	1		GRID	2245	0	-131.000	-380.576-1.080	0	
GRID	2029	0	-86.000	-316.174-2.124	0		GRID	2251	0	-41.500	-463.052-1.021	0	
GRID	2030	0	-60.647	-298.327-2.534	1		GRID	2252	0	-67.908	-482.973-2.716	0	
GRID	2031	0	-41.500	-293.800-4.750	0		GRID	2253	0	-81.403	-493.159-2.560	0	
GRID	2032	0	-54.216	-293.800-2.600	0		GRID	2254	0	-92.653	-501.646-2.430	0	
GRID	2033	0	-41.500	-293.800-3.209	0		GRID	2262	0	-41.500	-541.265-2.833	0	
GRID	2034	0	-25.500	-293.800-9.850	0		GRID	2263	0	-59.060	-542.488-2.670	0	
GRID	2037	0	-41.500	-308.500-5.350	0		GRID	2264	0	-73.693	-543.508-2.531	0	
GRID	2038	0	-54.216	-310.784-2.852	0		GRID	2265	0	-87.261	-544.453-2.399	0	
GRID	2039	0	-41.500	-308.500-3.166	0		GRID	2266	0	-102.862	-545.540-2.248	0	
GRID	2040	0	-25.500	-308.500-10.350	0		GRID	2275	0	-40.750	-479.550-5.000	0	
GRID	2044	0	-86.000	-332.494-2.350	0		GRID	2276	0	-29.250	-479.550-6.150	0	
GRID	2045	0	-81.500	-324.500-5.450	0		GRID	2280	0	-40.750	-462.820-5.500	0	
GRID	2046	0	-54.216	-326.784-2.750	0		GRID	2290	0	-29.250	-462.820-7.000	0	
GRID	2047	0	-41.500	-324.500-2.944	0		GRID	2292	0	-40.750	-446.100-5.650	0	
GRID	2048	0	-25.500	-324.500-10.350	0		GRID	2293	0	-29.250	-446.100-7.000	0	
GRID	2051	0	-139.738	-358.146-1.446	0		GRID	2294	0	-29.250	-492.500-4.500	0	
GRID	2052	0	-120.000	-354.601-1.763	0		GRID	2275	0	-40.750	-479.550-5.000	0	
GRID	2053	0	-86.000	-348.494-2.112	0		GRID	2276	0	-29.250	-479.550-6.150	0	
GRID	2054	0	-41.500	-340.500-5.450	0		GRID	2280	0	-40.750	-462.820-5.500	0	
GRID	2055	0	-54.216	-342.784-2.426	0		GRID	2290	0	-29.250	-462.820-7.000	0	
GRID	2056	0	-41.500	-340.500-2.598	0		GRID	2292	0	-40.750	-446.100-5.650	0	
GRID	2057	0	-25.500	-340.500-10.750	0		GRID	2293	0	-29.250	-446.100-7.000	0	
GRID	2060	0	-168.385	-379.292-2.984	0		GRID	2464	0	-40.750	-492.500-4.500	0	
GRID	2061	0	-157.000	-377.247-1.108	0		GRID	2465	0	-40.750	-492.500-4.750	0	
GRID	2062	0	-139.738	-374.146-1.256	0		GRID	2466	0	-29.250	-502.250-3.000	0	
GRID	2063	0	-131.000	-372.576-1.328	0		GRID	2467	0	-40.750	-502.250-4.250	0	
GRID	2064	0	-120.000	-370.601-1.418	0		GRID	2501	0	-54.702	-473.013-0.868	0	
GRID	2065	0	-86.000	-364.494-1.676	0		GRID	2502	0	-74.653	-488.066-0.638	0	
GRID	2066	0	-41.500	-356.500-5.800	0		GRID	2503	0	-87.028	-497.402-0.495	0	
GRID	2067	0	-54.216	-358.784-1.908	0		GRID	2504	0	-97.869	-505.582-0.370	0	
GRID	2068	0	-41.500	-356.500-2.028	0		GRID	2505	0	-106.606	-512.174-0.268	0	
GRID	2069	0	-25.500										

GRID	3017	0	-182.88	-319.4	0.	0		PBAR	2416	2	100.0	100.0	.00001	.001	+2416
GRID	3018	0	-182.88	-346.1950.	0	0		+2416			.0000001				+2416A
GRID	3019	0	-182.88	-376.6750.	0	0		+2416A	1.	.0000001					+2417
GRID	3020	0	-182.88	-381.3780.	0	0		+2417							+2417A
GRID	3021	0	-182.88	-391.3910.	0	0		+2417A	1.	.0000001					+2418
GRID	3022	0	-182.88	-400.6450.	0	0		+2418							+2418A
GRID	3046	0	-157.0	-375.37 0.	0	0		+2418A	1.	.0000001					+2419
GRID	3047	0	-157.0	-371.56 0.	0	0		+2419							+2419A
GRID	3048	0	-157.0	-381.56 0.	0	0		+2419A	1.	.0000001					+2420
GRID	3049	0	-157.0	-375.37 -10.0	0	0		+2419A							+2420A
GRID	3050	0	-157.0	-337.58 -12.0	0	0		+2419A	1.	.0000001					+2421
GRID	3051	0	-157.0	-368.06 -12.0	0	0		+2419A							+2421A
GRID	3053	0	-157.0	-371.56 -12.0	0	0		+2420							+2422
GRID	3054	0	-157.0	-375.37 -12.0	0	0		+2420A	1.	.0000001					+2422A
GRID	3055	0	-157.0	-381.56 -12.0	0	0		+2420A							+2423
GRID	3057	0	-157.0	-391.89 -12.0	0	0		+2423							+2423A
GRID	3058	0	-157.0	-293.8	-17.5	0		+2423A	1.	.0000001					+2424
GRID	3059	0	-157.0	-337.58 -17.5	0	0		+2424							+2424A
GRID	3060	0	-157.0	-353.19 -17.5	0	0		+2424A	1.	.0000001					+2425
GRID	3061	0	-157.0	-368.06 -17.5	0	0		+2425							+2425A
GRID	3062	0	-157.0	-391.89 -17.5	0	0		+2426							+2426
GRID	3063	0	-158.1	-371.56 -12.0	0	0		+2426A	1.	.0000001					+2426A
GRID	3064	0	-158.1	-381.56 -12.0	0	0		+2426A							+2427
GRID	3065	0	-158.1	-371.56 0.	0	0		+2427							+2427A
GRID	3066	0	-158.1	-381.56 0.	0	0		+2427A	1.	.0000001					+2428
GRID	3067	0	-155.9	-371.56 -12.0	0	0		+2428							+2428A
GRID	3068	0	-155.9	-381.56 -12.0	0	0		+2428A	1.	.0000001					+2429
GRID	3069	0	-155.9	-371.56 0.	0	0		+2429							+2429A
GRID	3070	0	-155.9	-381.56 0.	0	0		+2429A	1.	.0000001					+2430
GRID	3196	0	-79.0	-315.2360.	0	0		+2430							+2430A
GRID	3197	0	-63.0	-312.3620.	0	0		+2430A	1.	.0000001					+2431
GRID	3198	0	-79.0	-331.2160.	0	0		+2431							+2431A
GRID	3199	0	-63.0	-328.3620.	0	0		+2431A	1.	.0000001					+2432
GRID	3200	0	-79.0	-316.87 0.	0	0		+2432							+2432A
GRID	3201	0	-71.0	-316.87 0.	0	0		+2432A	1.	.0000001					+2433
GRID	3202	0	-63.0	-316.87 0.	0	0		+2433							+2433A
GRID	3203	0	-71.0	-316.87 0.	0	0		+2433A	1.	.0000001					+2434
GRID	3204	0	-71.0	-325.4 0.	0	0		+2434							+2434A
GRID	3205	0	-71.0	-377.3 0.	0	0		+2434A	1.	.0000001					+2435
GRID	3206	0	-71.0	-325.4 -10.0	0	0		+2435							+2435A
GRID	3207	0	-71.0	-325.4 -17.5	0	0		+2435A	1.	.0000001					+2436
GRID	3208	0	-71.0	-312.6 -17.5	0	0		+2436							+2436A
GRID	3209	0	-71.0	-312.6 -17.5	0	0		+2436A	1.	.0000001					+2437
GRID	3210	0	-71.0	-200.0 -30.5	0	0		+2437							+2437A
GRID	3211	0	-71.0	-302.58 -30.5	0	0		+2437A	1.	.0000001					+2438
GRID	3212	0	-71.0	-312.6 -30.5	0	0		+2438							+2438A
GRID	3213	0	-71.0	-340.5 -30.5	0	0		+2438A	1.	.0000001					+2439
GRID	3214	0	-120.	-335.09 -25.	0	0		+2439							+2439A
GRID	3501	0	-120.	-346.07 -11.20	0	0		+2439A	1.	.0000001					+2440
MAT1	1	10.5E6	5.53E6					+2440							+2440A
MAT1	2	10.5E6	4.0E6					+2440A	1.	.0000001					+2441
MAT1	3	9.999988	9.999988					+2441							+2441A
MAT1	4	10.5E6	9.999988					+2441A	1.	.0000001					+2442
MAT1	5	10.5E6	4.400E6					+2442							+2442A
MAT1	601	3.150E6	4.400E6					+2442A	1.	.0000001					+2443
MAT1	606	6.825E6	4.400E6					+2443							+2443A
MAT2	701	8681000.	2159000.	-78300.	7164000.	-78300.	2558000.	+2443A	1.	.0000001					+2444
MAT2	702	7047000.	2537000.	-160600.	8489000.	-160600.	2700000.	+2444							+2444A
MAT2	703	6618000.	2464000.	-254500.	8980000.	-254500.	2625000.	+2444A	1.	.0000001					+2445
MAT2	704	6501000.	2411000.	-94900.	9416000.	-94900.	2500000.	+2445							+2445A
MAT2	705	6047000.	2622000.	-109000.	9502000.	-109000.	2783000.	+2445A	1.	.0000001					+2446
MAT2	706	7849000.	2569000.	-130000.	7902000.	-130000.	2600000.	+2446							+2446A
MAT2	707	7849000.	2569000.	-130000.	7902000.	-130000.	2600000.	+2446A	1.	.0000001					+2447
MAT2	708	6516000.	2481000.	-178900.	9219000.	-178900.	2700000.	+2447							+2447A
MAT2	709	6299000.	2424000.	-149500.	9651000.	-149500.	2700000.	+2447A	1.	.0000001					+2448
MAT2	710	6427000.	2319000.	-413300.	9734000.	-413300.	2800000.	+2448							+2448A
PARAM	GRDPNT	0						+2448A	1.	.0000001					+2449
PARAM	WTMMASS	0.00258						+2449							+2449A
PBAR	27	2	100.	9999.	9999.	9999.		+2449A	1.	.0000001					+2450
PBAR	2401	2	100.0	100.0	.00001	.001		+2450							+2450A
+2401	1.	.0000001						+2450A	1.	.0000001					+2451
PBAR	2402	2	100.0	100.0	.00001	.001		+2451							+2451A
+2402	1.	.0000001						+2451A	1.	.0000001					+2452
PBAR	2403	2	100.0	100.0	.00001	.001		+2452							+2452A
+2403	1.	.0000001						+2452A	1.	.0000001					+2453
PBAR	2404	2	100.0	100.0	.00001	.001		+2453							+2453A
+2404	1.	.0000001						+2453A	1.	.0000001					+2454
PBAR	2405	2	100.0	100.0	.00001	.001		+2454							+2454A
+2405	1.	.0000001						+2454A	1.	.0000001					+2455
PBAR	2406	2	100.0	100.0	.00001	.001		+2455							+2455A
+2406	1.	.0000001						+2455A	1.	.0000001					+2456
PBAR	2407	2	100.0	100.0	.00001	.001		+2456							+2456A
+2407	1.	.0000001						+2456A	1.	.0000001					+2457
PBAR	2408	2	100.0	100.0	.00001	.001		+2457							+2457A
+2408	1.	.0000001						+2457A	1.	.0000001					+2458
PBAR	2409	2	100.0	100.0	.00001	.001		+2458							+2458A
+2409	1.	.0000001						+2458A	1.	.0000001					+2459
PBAR	2410	2	100.0	100.0	.00001	.001		+2459							+2459A
+2410	1.	.0000001						+2459A	1.	.0000001					+2460
PBAR	2411	2	100.0	100.0	.00001	.001		+2460							+2460A
+2411	1.	.0000001						+2460A	1.	.0000001					+2461
PBAR	2412	2	100.0	100.0	.00001	.001		+2461							+2461A
+2412	1.	.0000001						+2461A	1.	.0000001					+2462
PBAR	2412A	1.	.0000001					+2462							+2462A
PBAR	2413	2	100.0	100.0	.00001	.001		+2463							+2463A
+2413	1.	.0000001						+2463A	1.	.0000001					+2464
PBAR	2414	2	100.0	100.0	.00001	.001		+2464							+2464A
+2414	1.	.0000001						+2464A	1.	.0000001					+2465
PBAR	2415	2	100.0	100.0	.00001	.001		+2465							+2465A
+2415	1.	.0000001						+2465A	1.	.0000001					+2466
+2415A	1.	.0000001						+2466							+2467

PBAR	2454	2	100.0	100.0	.00001	.001	+2454	PBEAM	44	2	2.340	9999.0	293.75		+44
+2454A	1.	.0000001					+2454A	PBEAM	44	1.0	1.430	9999.0	99.875	.001	+45
PBAR	2455	2	100.0	100.0	.00001	.001	+2455	PBEAM	45	2	1.430	9999.0	215.00	.001	+45
+2455							+2455A	PBEAM	45	1.0	1.521	76.375			+46
+2455A	1.	.0000001					+2455A	PBEAM	46	2	2.250	9999.0	162.00		+47
PBAR	2456	2	100.0	100.0	.00001	.001	+2456	PBEAM	47	2	2.250	9999.0	133.00		+48
+2456							+2456A	PBEAM	48	2	1.875	9999.0	133.00		+48
+2456A	1.	.0000001					+2457	PBEAM	48	1.0	2.250	46.00			
PBAR	2457	2	100.0	100.0	.00001	.001	+2457A	PBEAM	49	2	1.256	1.	41.26	.001	+49
+2457							+2457A	PBEAM	49	1.0	1.354	51.57			+49A
+2457A	1.	.0000001					+2458	PBEAM	50	2	1.354	1.	51.57		+50
PBAR	2458	2	100.0	100.0	.00001	.001	+2458A	PBEAM	50	1.0	1.371	53.59			+50A
+2458							+2458A	PBEAM	50	1.	.0185				
+2458A	1.	.0000001					+2459	PBEAM	51	2	1.371	1.	53.59		+51
PBAR	2459	2	100.0	100.0	.00001	.001	+2459A	PBEAM	51	1.0	1.371	53.59			+51A
+2459							+2460	PBEAM	52	2	1.371	1.	60.14	.001	+52
+2459A	1.	.0000001					+2460A	PBEAM	52	1.0	1.534	60.14			+52A
PBAR	2460	2	100.0	100.0	.00001	.001	+2460A	PBEAM	52	1.	.0622				
+2460							+2460A	PBEAM	53	2	1.534	60.14			
+2460A	1.	.0000001					+2461	PBEAM	54	2	.942	1.	37.54	.001	+54
PBAR	3502	2	10000.	99990.	99990.	99990.	+2461	PBEAM	54	1.0	1.449	76.22			+54A
PBEAM	1	2	.690	480.000	371.450		+2461	PBEAM	54	1.	.4242				
+1	NO	1.0		593.000	547.400		+2462	PBEAM	55	2	1089.0001.	9999.00	.001	+55	
+1A	0.	1.					+2462	PBEAM	55	1.0	1980.000	9999.00		+55A	
PBEAM	2	2	.690	593.000	547.400		+2463	PBEAM	56	2	1980.0001.	9999.00	.001	+56	
+2	NO	1.0		736.000	606.050		+2463	PBEAM	56	1.0	1485.000	9999.00		+56A	
+2A	0.	1.					+2464	PBEAM	57	2	1.440	.001	.001	+57	
PBEAM	3	2	4.140	896.000	655.500	640.	+2464	PBEAM	57	1.0	1.440	.001	.001	+57A	
+3	NO	1.0		912.000	656.500		+2465	PBEAM	57A	0.	1.	.0000			
+3A	0.	1.					+2465	PBEAM	58	2	2.380	1.	46.34	.001	+141
PBEAM	4	2	4.140	912.000	656.500	2175.	+2465	PBEAM	58	1.0	2.520	52.89		+141A	
+4	NO	1.0		3104.0001780.000			+2466	PBEAM	58	1.	.0513				
+4A	0.	1.					+2466	PBEAM	59	2	2.800	1.	61.49	.001	+144
PBEAM	5	2	4.140	3104.0001780.000		2770.	+2466	PBEAM	59	1.0	3.080	76.54		+144A	
+5	NO	1.0		6240.0003625.000			+2467	PBEAM	59A	0.	1.	.0952			
+5A	0.	1.					+2467	PBEAM	60	2	3.000	1.	76.54	.001	+145
PBEAM	6	2	3.600	8000.0004245.000		5250.	+2467	PBEAM	60	1.0	3.080	76.54		+145A	
+6	NO	1.0		7900.0004430.000			+2468	PBEAM	60A	0.	1.	.0000			
+6A	0.	1.					+2468	PBEAM	61	2	2.800	1.	61.49	.001	+146
PBEAM	7	2	1980.0007900.000430.000			5250.	+2468	PBEAM	61	1.0	3.080	76.54		+146A	
+7	NO	1.0		8100.0004170.000			+2469	PBEAM	61A	0.	1.	.0541			
+7A	0.	1.					+2469	PBEAM	62	2	2.600	1.	54.50	.001	+147
PBEAM	8	2	1980.0008100.0004170.000			5250.	+2469	PBEAM	62A	0.	1.	61.49			+147A
+8	NO	1.0		9400.0003900.000			+2470	PBEAM	63	2	2.800	1.	.0513		
+8A	0.	1.					+2470	PBEAM	63A	0.	1.	.2222			
PBEAM	9	2	1980.0009400.0003900.000			5250.	+2470	PBEAM	64	2	1.875	1.	.3937	.001	+149
+9	NO	1.0		9400.0003887.062			+2471	PBEAM	64A	0.	1.	.2500	59.52		+149A
+9A	0.	1.					+2471	PBEAM	65	2	1.017	1.	34.25	.001	+147
PBEAM	10	2	1980.0009400.0003887.062			5250.	+2471	PBEAM	65A	0.	1.	1.620	103.19		+147A
+10	NO	1.0		10100.0003670.000			+2472	PBEAM	66	2	1.017	1.	34.25	.001	+148
+10A	0.	1.					+2472	PBEAM	66A	0.	1.	.4573			+148A
PBEAM	11	2	1980.00010100.0003670.000			5250.	+2472	PBEAM	67	2	1.500	1.	24.08	.001	+149
+11	NO	1.0		10000.0003691.000			+2473	PBEAM	67A	0.	1.	14.000	39.37		+149A
+11A	0.	1.					+2473	PBEAM	68	2	1.538	1.	86.52	.001	+150
PBEAM	12	2	1980.0001000.0003691.000			5250.	+2473	PBEAM	68A	0.	1.	1.750	115.17		+150A
+12	NO	1.0		9600.0003700.000			+2474	PBEAM	69	2	1.017	1.	115.17	.001	+151
+12A	0.	1.					+2474	PBEAM	69A	0.	1.	.1293			+151A
PBEAM	13	2	1980.0009600.0003700.000			5250.	+2475	PBEAM	70	2	1.750	1.	115.17	.001	+152
+13	NO	1.0		8750.0003780.000			+2475	PBEAM	70A	0.	1.	.1293			+152A
+13A	0.	1.					+2476	PBEAM	71	2	1.750	1.	115.17	.001	+153
PBEAM	14	2	1980.0008750.0003780.000			5250.	+2476	PBEAM	71A	0.	1.	.1293			+153A
+14	NO	1.0		8123.6303590.000			+2477	PBEAM	72	2	1.750	1.	115.17	.001	+154
+14A	0.	1.					+2477	PBEAM	72A	0.	1.	.1293			+154A
PBEAM	15	2	1980.0008123.6303590.000			5250.	+2478	PBEAM	73	2	1.750	1.	115.17	.001	+155
+15	NO	1.0		7200.0003340.000			+2478	PBEAM	73A	0.	1.	.1293			+155A
+15A	0.	1.					+2479	PBEAM	74	2	1.750	1.	115.17	.001	+156
PBEAM	16	2	1980.0007200.0003340.000			5067.5	+2479	PBEAM	74A	0.	1.	.1293			+156A
+16	NO	1.0		6425.0001872.000			+2480	PBEAM	75	2	1.750	1.	115.17	.001	+157
+16A	0.	1.					+2480	PBEAM	75A	0.	1.	.1293			+157A
PBEAM	17	2	1980.0006425.0	1872.000		4910.0	+2481	PBEAM	76	2	1.750	1.	115.17	.001	+158
+17	NO	1.0		1980.0006375.0	1791.00		+2481	PBEAM	76A	0.	1.	.1293			+158A
+17A	0.	1.		.0000			+2482	PBEAM	77	2	1.750	1.	115.17	.001	+159
PBEAM	18	2	1980.0006375.0	1791.00		4725.0	+2482	PBEAM	77A	0.	1.	.1293			+159A
+18	NO	1.0		1980.0006200.0	1470.00		+2483	PBEAM	78	2	14.000	1.	129.80	.001	+160
+18A	0.	1.		.0000			+2483	PBEAM	78A	0.	1.	.1293			+160A
PBEAM	19	2	1980.0006200.0	1470.00		4515.0	+2484	PBEAM	79	2	14.000	1.	130.90	.001	+161
+19	NO	1.0		1980.0006900.0	1374.00		+2484	PBEAM	79A	0.	1.	.2500			+161A
+19A	0.	1.		.0000			+2485	PBEAM	80	2	30.000	.001	.001	+162	
PBEAM	20	2	1980.0006900.0	1374.00		4375.5	+2485	PBEAM	80A	0.	1.	.2500			+162A
+20	NO	1.0		1980.0008250.0	1167.00		+2486	PBEAM	81	2	1.000	1.	121.33	.001	+163
+20A	0.	1.		.0000			+2486	PBEAM	81A	0.	1.	.2500			+163A
PBEAM	21	2	1980.0008250.0	1167.00		4147.5	+2487	PBEAM	82	2	1980.0001.	9999.00	.001	+164	
+21	NO	1.0		1980.0008250.0	960.00		+2487	PBEAM	82A	0.	1.	.2500			+164A
+21A	0.	1.		.0000			+2488	PBEAM	83	2	2970.0001.	9999.00	.001	+165	
PBEAM	22	2	1.	8250.000960.00		3885.	+2488	PBEAM	83A	0.	1.	.2500			+165A
+22	NO	1.0		8250.000			+2489	PBEAM	84	2	2970.0001.	9999.00	.001	+166	
+22A	0.	1.					+2489	PBEAM	84A	0.	1.	.2500			+166A
PBEAM	31	2	200.000	9999.0	9999.00	.01	+2490	PBEAM	85	2	2970.0001.	9999.00	.001	+167	
+31	NO	1.0		197.000			+2490	PBEAM	85A	0.	1.	.2500			+167A
PBEAM	32	2	200.000	9999.0	9999.00	.01	+2491	PBEAM	86	2	2970.0001.	9999.00	.001	+168	
+32	NO	1.0		200.000			+2491	PBEAM	86A	0.	1.	.2500			+168A
PBEAM															

+171A	0.	1.	.0000	PBEAM	1035	2	0.1134	1.	.241	+1035				
PBEAM	172	2	1.230	1.	84.87	.001	+172	NO	1.	.0864	.140	+1035A		
+172	NO	1.0	1.000		57.12		+172A			.270				
+172A	0.	1.	.2063				+1035A	0.	1.					
PBEAM	173	2	1.125	1.	41.92	.001	+173	PBEAM	1036	2	.371385	1.	7.726	+1036
+173	NO	1.0	1.188		46.53		+173A			.208421			+1036A	
+173A	0.	1.	.0541				+1036A	0.	1.	.562				
PBEAM	174	2	.750	1.	12.63	.001	+174	PBEAM	1037	2	0.0864	1.	.140	+1037
+174	NO	1.0	1.063		23.78		+174A			.06364			+1037A	
+174A	0.	1.	.3448				+1037A	0.	1.	.303				
PBEAM	175	2	1059.3001.		9999.00	.001	+175	PBEAM	1038	2	0.54612	1.	5.551	+1038
+175	NO	1.0	841.500		9999.00		+175A			.58212			+1038A	
+175A	0.	1.	.0000				+1038A	0.	1.		-6.38-2			
PBEAM	176	2	.75000	1.	2.98	.001	+176	PBEAM	1039	2	0.19404	1.	4.814	+1039
+176	NO	1.0	79.000		12.10		+176A			.015936			+1039A	
+176A	0.	1.	.0000				+1039A	0.	1.	.196				
PBEAM	177	2	79.000	1.	12.10	.001	+177	PBEAM	1040	2	0.15936	1.	2.212	+1040
+177	NO	1.0	82.000		29.71		+177A			.01296			+1040A	
+177A	0.	1.	.0000				+1040A	0.	1.	.140				
PBEAM	178	2	82.000	1.	29.71	.001	+178	PBEAM	1041	2	0.216	1.	.233	+1041
+178	NO	1.0	85.000		29.71		+178A			.01411			+1041A	
+178A	0.	1.	.0000				+1041A	0.	1.	.419				
PBEAM	179	2	85.000	9999.0	46.06	.001	+179	PBEAM	1043	2	.1148	1.	.239	+1043
+179	NO	1.0	90.000				+1043	NO	1.	.118531			+1043A	
PBEAM	180	2	90.000	9999.0	46.06	.001	+180	PBEAM	1045	2	0.02716	1.	3.2	+1045
+180	NO	1.0	55.800		31.90		+1045	NO	1.	.02891			+1045A	
PBEAM	181	2	990.000	1.	9999.00	.001	+181	PBEAM	1046	2	.118531	1.	.255	+1046
+181	NO	1.0					+1046	NO	1.	.103033			+1046A	
PBEAM	182	2	990.000	1.	9999.00	.001	+182	PBEAM	1047	2	0.02568	1.	0.001	+1047
+182	NO	1.0					+1047	NO	1.	.02513			+1047A	
PBEAM	1001	2	1.34778	1.	14.325	+1001	PBEAM	1048	2	.103033	1.	.193	+1048	
+1001	NO	1.	1.32951		14.209	+1001A		+1048A			.082328			
+1001A	0.	1.	.136-2				+1048A	0.	1.		.123			
PBEAM	1002	2	1.32951	1.	14.209	+1002	PBEAM	1049	2	.082328	1.	.637	+1049	
+1002	NO	1.	1.23648		13.640	+1002A		+1049A			.05289		+1049A	
+1002A	0.	1.	.725-2				+1049A	0.	1.	.435				
PBEAM	1003	2	1.23648	1.	13.640	+1003	PBEAM	1050	2	12.9	1.	.952	+1050	
+1003	NO	1.	1.09137		12.836	+1003A		+1050A			.2-1.266			
+1003A	0.	1.	.125				+1050A	0.	1.					
PBEAM	1004	2	1.09137	1.	12.836	+1004	PBEAM	1051	2	0.41616	1.	4.768	+1051	
+1004	NO	1.	0.85176		11.727	+1004A		+1051A			.39888		+1051A	
+1004A	0.	1.	.247				+1051A	0.	1.		.424-2			
PBEAM	1005	2	0.85176	1.	11.727	+1005	PBEAM	1052	2	0.28808	1.	3.968	+1052	
+1005	NO	1.	0.57309		10.782	+1005A		+1052			.022399		+1052A	
+1005A	0.	1.	.391				+1052	NO	1.		.2323			
PBEAM	1007	2	0.5201	1.	4.137	+1007	PBEAM	1053	2	0.22399	1.	2.323	+1053	
+1007	NO	1.	0.5704		4.188	+1007A		+1053A			.013195			
+1007A	0.	1.	.9-2.23-2				+1053A	0.	1.	.0772				
PBEAM	1009	2	0.05068	1.	7.4	+1009	PBEAM	1054	2	0.13195		.077	+1053A	
+1009	NO	1.	0.05704			+1009A		+1054			.1.266			
+1009A	0.	1.	.118				+1054	0.	1.	.517				
PBEAM	1010	2	0.68448	1.	11.387	+1010	PBEAM	1055	2	10.15	1.	1.104	+1054	
+1010	NO	1.	0.65988		10.584	+1010A		+1055A			.2.3		+1054A	
+1010A	0.	1.	.3.66-2				+1055A	0.	1.	.1.261				
PBEAM	1011	2	0.65988	1.	3.834	+1011	PBEAM	1056	2	0.0772		.112	+1056	
+1011	NO	1.	0.58224		3.781	+1011A		+1056			.07868		+1056A	
+1011A	0.	1.	.125				+1056	NO	1.					
PBEAM	1012	2	0.4852	1.	2.985	+1012	PBEAM	1057	2	0.07868	1.	.116	+1057	
+1012	NO	1.	0.3817		3.085	+1012A		+1057			.06116		+1057A	
+1012A	0.	1.	.239				+1057A	0.	1.	.251				
PBEAM	1013	2	0.3817	1.	4.113	+1013	PBEAM	1058	2	0.06116	1.	.587	+1058	
+1013	NO	1.	0.2527		3.779	+1013A		+1058			.0332		+1058A	
+1013A	0.	1.	.407				+1058A	0.	1.	.593				
PBEAM	1014	2	1.1795	1.	32.608	+1014	PBEAM	1059	2	8.3	1.	.173	+1059	
+1014	NO	1.	1.24325		37.764	+1014A		+1059			.18		+1059A	
+1014A	0.	1.	.5-2.26-2				+1059A	0.	1.		.1.287			
PBEAM	1015	2	1.24325	1.	35.291	+1015	PBEAM	1060	2	0.6004	1.	1.874	3.	
+1015	NO	1.	1.26225		36.787	+1015A		+1060			.513		+1060A	
+1015A	0.	1.	.1-1.52-2				+1060A	0.	1.	.157				
PBEAM	1016	2	1.0098	1.	36.787	+1016	PBEAM	1061	2	0.513	1.	1.073	2.	
+1016	NO	1.	0.997		28.514	+1016A		+1061			.2508		+1061A	
+1016A	0.	1.	.118				+1061A	0.	1.	.687				
PBEAM	1017	2	0.897	1.	28.514	+1017	PBEAM	1062	2	6.6	1.	.249	+1062	
+1017	NO	1.	0.7106		17.378	+1017A		+1062			.1.5		+1062A	
+1017A	0.	1.	.232				+1062A	0.	1.		.1.259			
PBEAM	1018	2	0.88825	1.	17.378	+1018	PBEAM	1071	2	.563180	1.	30.125	+1071	
+1018	NO	1.	0.569		7.448	+1018A		+1071			.456388		+1071A	
+1018A	0.	1.	.438				+1071A	0.	1.	.209				
PBEAM	1020	2	.174168	1.	2.924	+1020	PBEAM	1072	2	.682631	1.	8.277	+1072	
+1020	NO	1.	.192741		3.774	+1020A		+1072			.665175		+1072A	
+1020A	0.	1.	.-101				+1072A	0.	1.		.7.859			
PBEAM	1022	2	.004037	1.	8.0	+1022	PBEAM	1073	2	.554312	1.	7.859	+1073	
+1022	NO	1.	.004701		3.	+1022A		+1073			.515704		+1073A	
+1022A	0.	1.	.-152				+1073A	0.	1.		.157			
PBEAM	1023	2	.192741	1.	3.774	+1023	PBEAM	1074	2	.58975	1.	14.868	+1074	
+1023	NO	1.	.173225		1.931	+1023A		+1074			.531		+1074A	
+1023A	0.	1.	.107				+1074A	0.	1.	.105				
PBEAM	1024	2	.173225	1.	1.931	+1024	PBEAM	1075	2	.675834	1.	32.711	+1075	
+1024	NO	1.	.137473		.991	+1024A		+1075			.608902		+1075A	
+1024A	0.	1.	.230				+1075A	0.	1.	.104				
PBEAM	1025	2	.137473	1.	.991	+1025	PBEAM	1076	2	.74152	1.	3.66	+1076	
+1025	NO	1.	.085198		4.751	+1025A		+1076			.64649		+1076A	
+1025A	0.	1.	.470				+1076A	0.	1.	.137				
PBEAM	1026	2	0.53326	1.	4.915	+1026	PBEAM	1077	2	0.59576	1.	12.691	+1077	
+1026	NO	1.	0.56896		4.995	+1026A		+1077			.50976		+1077A	
+1026A	0.	1.	.-6.48-2				+1077A	0.	1.		.2256			
PBEAM	1027	2	0.97536	1.	4.995	+1027	PBEAM	1078	2	.531	1.	6.135	+1078	
+1027	NO	1.	.93792		4.858	+1027A		+1078			.504625		+1078A	
+1027A	0.	1.	.3.91-2				+1078A	0.	1.		.5.09-2			
PBEAM	1028	2	0.54712	1.	4.858	+1028	PBEAM	1079	2	.0.52481	1.	5.541	+1079	
+1028	NO	1.	0.43652		2.292	+1028A		+1079			.49517		+1079A	
+1028A	0.	1.	.225				+1079A	0.	1.		.5.81-2			
PBEAM	1029	2	0.12472	1.	2.292	+1029	PBEAM	1080	2	.0.41899	1.	4.933	+1080	
+1029	NO	1.	.0.07392		.998	+1029A		+1080			.365896		+1080A	
+1029A	0.	1.	.511				+1080A	0.	1.		.135			
PBEAM	1031	2	.602006	1.	12.135	+1031	PBEAM	1081	2	.902630</td				

PBEAM	1084	2	0.9402	1.	2.762	+1084	PBEAM	1122	2	0.23987	1.	.388	+1122	
+1084	NO	1.	0.8128		2.065	+1084A	+1122	NO	1.	0.2193		.324	+1122A	
+1084A	O.	1.		.145		+1122A	O.	1.			8.96-2			
PBEAM	1085	2	0.48768	1.	2.242	+1085	PBEAM	1123	2	2.193	1.	0.577	+1123	
+1085	NO	1.	0.39912		2.251	+1085A	+1123	NO	1.	1.7255		0.319	+1123A	
+1085A	O.	1.		.200		+1123A	O.	1.		.239				
PBEAM	1086	2	0.73172	1.	4.425	+1086	PBEAM	1124	2	1.7255	1.	0.319	+1124	
+1086	NO	1.	0.7194		4.277	+1086A	+1124	NO	1.	1.411		0.186	+1124A	
+1086A	O.	1.		1.70-2		+1124A	O.	1.		.201				
PBEAM	1087	2	0.7194	1.	4.277	+1087	PBEAM	1125	2	1.411	1.	0.186	+1125	
+1087	NO	1.	0.66748		3.682	+1087A	+1125	NO	1.	1.122		.37	+1125A	
+1087A	O.	1.		7.49-2		+1125A	O.	1.		.228				
PBEAM	1088	2	0.48544	1.	3.682	+1088	PBEAM	1126	2	0.290	1.	.15	+1126	
+1088	NO	1.	0.448		3.136	+1088A	+1126	NO	1.	0.230			+1126A	
+1088A	O.	1.		8.02-2		+1126A	O.	1.		.231				
PBEAM	1089	2	0.616	1.	3.136	+1089	PBEAM	1127	2	0.230	1.	.15	+1127	
+1089	NO	1.	0.59752		2.951	+1089A	+1127	NO	1.	0.180			+1127A	
+1089A	O.	1.		3.05-2		+1127A	O.	1.		.244				
PBEAM	1090	2	0.59752	1.	3.319	+1090	PBEAM	1128	2	0.180	1.	.15	+1128	
+1090	NO	1.	0.56496		2.968	+1090A	+1128	NO	1.	0.150			+1128A	
+1090A	O.	1.		5.60-2		+1128A	O.	1.		.182				
PBEAM	1091	2	.964044	1.	26.163	+1091	PBEAM	1131	2	24.900	1.	2.334	+1131	
+1091	NO	1.	.900046		33.946	+1091A	+1131	NO	1.0	41.600		4.497	+1131A	
+1091A	O.	1.		6.87-2		+1131A	O.	1.		.502				
PBEAM	1092	2	.80058	1.	8.240	+1092	PBEAM	1132	2	22.300	1.	1.258	+1132	
+1092	NO	1.	.740025		7.040	+1092A	+1132	NO	1.0	43.800		6.091	+1132A	
+1092A	O.	1.		7.86-2		+1132A	O.	1.		.651				
PBEAM	1093	2	0.9867	1.	3.017	+1093	PBEAM	1133	2	43.800	1.	6.091	.001	+1133
+1093	NO	1.	0.92935		2.678	+1093A	+1133	NO	1.0	46.400		8.843	+1133A	
+1093A	O.	1.		5.97-2		+1133A	O.	1.		.058				
PBEAM	1094	2	0.7605	1.	2.231	+1094	PBEAM	1134	2	46.4	100.	13.5	10.	+1134
+1094	NO	1.	.70344		1.909	+1094A	+1134	NO	1.	50.68			+1134A	
+1094A	O.	1.		7.80-2		+1134A	O.	1.		.8-8.2-2				
PBEAM	1095	2	0.62528	1.	2.245	+1095	PBEAM	1135	2	20.300	1.	1.601	+1135	
+1095	NO	1.	0.56416		5.554	+1095A	+1135	NO	1.0	39.600		5.214	+1135A	
+1095A	O.	1.		.103		+1135A	O.	1.		.644				
PBEAM	1096	2	1.12832	1.	3.720	+1096	PBEAM	1136	2	17.900	1.	1.469	+1136	
+1096	NO	1.	1.03488		3.138	+1096A	+1136	NO	1.0	35.300		4.849	+1136A	
+1096A	O.	1.		8.64-2		+1136A	O.	1.		.654				
PBEAM	1097	2	0.58212	1.	.9936	+1097	PBEAM	1137	2	35.300	1.	4.849	.001	+1137
+1097	NO	1.	0.52038		.794	+1097A	+1137	NO	1.0	39.910		7.360	+1137A	
+1097A	O.	1.		.112		+1137A	O.	1.		.123				
PBEAM	1098	2	0.46256	1.	.878	+1098	PBEAM	1138	2	39.91	100.	10.5	10.	+1138
+1098	NO	1.	0.41088		.692	+1098A	+1138	NO	1.	40.37			+1138A	
+1098A	O.	1.		.118		+1138A	O.	1.		.1-1.5-2				
PBEAM	1099	2	0.56496	1.	2.968	+1099	PBEAM	1139	2	15.900	1.	1.286	+1139	
+1099	NO	1.	0.50864		3.405	+1099A	+1139	NO	1.0	31.800		4.283	+1139A	
+1099A	O.	1.		.105		+1139A	O.	1.		.667				
PBEAM	1100	2	0.32368	1.	2.951	+1100	PBEAM	1140	2	14.000	1.	.836	+1140	
+1100	NO	1.	0.2702		1.360	+1100A	+1140	NO	1.0	28.200		2.827	+1140A	
+1100A	O.	1.		.180		+1140A	O.	1.		.673				
PBEAM	1101	2	0.2895	1.	1.434	+1101	PBEAM	1141	2	28.200	1.	2.827	.001	+1141
+1101	NO	1.	0.237		1.561	+1101A	+1141	NO	1.0	32.160		4.634	+1141A	
+1101A	O.	1.		.199		+1141A	O.	1.		.131				
PBEAM	1102	2	.803494	1.	19.105	+1102	PBEAM	1142	2	32.16	100.	.794	10.	+1142
+1102	NO	1.	.756148		18.318	+1102A	+1142	NO	1.	32.70			+1142A	
+1102A	O.	1.		6.07-2		+1142A	O.	1.		.1-1.67-2				
PBEAM	1103	2	.868368	1.	3.7	+1103	PBEAM	1143	2	12.800	1.	.537	+1143	
+1103	NO	1.	.808308		3.656	+1103A	+1143	NO	1.0	26.050		1.860	+1143A	
+1103A	O.	1.		7.16-2		+1143A	O.	1.		.682				
PBEAM	1104	2	0.56848	1.	7.616	+1104	PBEAM	1144	2	11.190	1.	.541	+1144	
+1104	NO	1.	0.53648		2.977	+1104A	+1144	NO	1.0	23.000		1.894	+1144A	
+1104A	O.	1.		5.79-2		+1144A	O.	1.		.691				
PBEAM	1105	2	0.53648	1.	1.985	+1105	PBEAM	1145	2	23.000	1.	1.894	.001	+1145
+1105	NO	1.	0.49888		2.015	+1105A	+1145	NO	1.0	25.560		3.414	+1145A	
+1105A	O.	1.		7.26-2		+1145A	O.	1.		.105				
PBEAM	1106	2	0.49888	1.	2.217	+1106	PBEAM	1146	2	25.56	100.	6.5	10.	+1146
+1106	NO	1.	0.4536		2.014	+1106A	+1146	NO	1.	27.16			+1146A	
+1106A	O.	1.		9.51-2		+1146A	O.	1.		.6070-2				
PBEAM	1107	2	0.70875	1.	2.009	+1107	PBEAM	1147	2	9.060	1.	.492	+1147	
+1107	NO	1.	.664		1.764	+1107A	+1147	NO	1.0	19.800		1.700	+1147A	
+1107A	O.	1.		6.52-2		+1147A	O.	1.		.744				
PBEAM	1108	2	0.3984	1.	.670	+1108	PBEAM	1148	2	7.640	1.	.210	+1148	
+1108	NO	1.	0.37695		.600	+1108A	+1148	NO	1.0	17.500		.929	+1148A	
+1108A	O.	1.		5.53-2		+1148A	O.	1.		.784				
PBEAM	1109	2	0.37695	1.	.600	+1109	PBEAM	1149	2	17.500	1.	.929	.001	+1149
+1109	NO	1.	.3324		1.367	+1109A	+1149	NO	1.0	18.620		1.942	+1149A	
+1109A	O.	1.		.126		+1149A	O.	1.		.062				
PBEAM	1110	2	0.35456	1.	1.367	+1110	PBEAM	1150	2	18.62	100.	.432	10.	+1150
+1110	NO	1.	0.31472		.368	+1110A	+1150	NO	1.	19.3			+1150A	
+1110A	O.	1.		.119		+1150A	O.	1.		.3-3.59-2				
PBEAM	1111	2	0.15736	1.	.242	+1111	PBEAM	1151	2	7.100	1.	.042	+1151	
+1111	NO	1.	0.1264		1.156	+1111A	+1151	NO	1.0	16.900		.269	+1151A	
+1111A	O.	1.		.218		+1151A	O.	1.		.817				
PBEAM	1112	2	0.1728	1.	.303	+1112	PBEAM	1152	2	22.300	1.	1.150	+1152	
+1112	NO	1.	0.16064		.262	+1112A	+1152	NO	1.0	24.900		1.440	+1152A	
+1112A	O.	1.		7.29-2		+1152A	O.	1.		.110				
PBEAM	1113	2	0.16064	1.	.222	+1113	PBEAM	1153	2	20.300	1.	.870	+1153	
+1113	NO	1.	0.13784		.163	+1113A	+1153	NO	1.0	22.300		1.150	+1153A	
+1113A	O.	1.		.153		+1153A	O.	1.		.094				
PBEAM	1114	2	0.13784	1.	.148	+1114	PBEAM	1154	2	17.900	1.	.630	+1154	
+1114	NO	1.	0.12232		.117	+1114A	+1154	NO	1.0	20.300		.870	+1154A	
+1114A	O.	1.		.119		+1154A	O.	1.		.126				
PBEAM	1115	2	0.12232	1.	.117	+1115	PBEAM	1155	2	15.900	1.	.470	+1155	
+1115	NO	1.	.108		.991	+1115A	+1155	NO	1.0	17.900		.630	+1155A	
+1115A	O.	1.		.124		+1155A	O.	1.		.118				
PBEAM	1116	2	.33771	1.	19.909	+1116	PBEAM	1156	2	14.000	1.	.340	+1156	
+1116	NO	1.	.312716		19.868	+1116A	+1156	NO	1.0	15.900		.470	+1156A	
+1116A	O.	1.		7.69-2		+1156A	O.	1.		.127				
PBEAM	1117	2	0.85918	1.	3.590	+1117	PBEAM	1157	2	12.800	1.	.260	+1157	
+1117	NO	1.	.77384		3.626	+1117A	+1157	NO	1.0	14.000		.340	+1157A	
+1117A	O.	1.		.105		+1157A	O.	1.		.090				
PBEAM	1118	2	0.54											

PBEAM	1162	2	43.800	1.	5.189	+1162	PBEAM	1209	2	12.820	1.	1.20000	.265	+1209
+1162	NO	1.0	41.600		5.636	+1162A	+1209	NO	1.0	10.280		.07100		+1209A
+1162A	0.	1.		.052		+1163	PBEAM	1210	2	10.280	1.	.07100	.265	+1210
PBEAM	1163	2	39.600	1.	4.049	+1163A	+1210	NO	1.0	6.960		.02500		+1210A
+1163	NO	1.0	43.800		5.170	+1164	PBEAM	1211	2	6.960	1.	.02500	.265	+1211
+1163A	0.	1.		.101		+1164A	+1211	NO	1.0	3.640		.00370		+1211A
PBEAM	1164	2	35.300	1.	3.053	+1165	PBEAM	1212	2	0.7055	100.	.32	.001	+1212
+1164	NO	1.0	39.600		4.049	+1165A	+1212	NO	1.	0.63		.025		+1212A
+1164A	0.	1.		.115		+1166	PBEAM	1213	2	12.600	1.	.70000	.265	+1213
PBEAM	1165	2	31.800	1.	2.364	+1166A	+1213	NO	1.0	11.690		.70000		+1213A
+1165	NO	1.0	35.300		3.040	+1167	PBEAM	1214	2	11.690	1.	.70000	.265	+1214
+1165A	0.	1.		.104		+1167A	+1214	NO	1.0	9.420		.00530		+1214A
PBEAM	1166	2	28.200	1.	1.762	+1168	PBEAM	1215	2	9.420	1.	.05530	.265	+1215
+1166	NO	1.0	31.800		2.354	+1168A	+1215	NO	1.0	6.360		.01900		+1215A
+1166A	0.	1.		.120		+1169	PBEAM	1216	2	6.360	1.	.01900	.265	+1216
PBEAM	1167	2	26.050	1.	1.444	+1169A	+1216	NO	1.0	3.330		.00290		+1216A
+1167	NO	1.0	28.200		1.754	+1170	PBEAM	1217	2	11.400	1.	.40000	.265	+1217
+1167A	0.	1.		.079		+1170A	+1217	NO	1.0	10.620		.40000		+1217A
PBEAM	1168	2	23.000	1.	1.274	+1171	PBEAM	1218	2	10.620	1.	.40000	.265	+1218
+1168	NO	1.0	26.050		1.431	+1171A	+1218	NO	1.0	8.570		.01970		+1218A
+1168A	0.	1.		.124		+1172	PBEAM	1219	2	8.570	1.	.01970	.265	+1219
PBEAM	1169	2	19.800	1.	1.019	+1172A	+1219	NO	1.0	5.750		.00760		+1219A
+1169	NO	1.0	23.000		1.269	+1173	PBEAM	1220	2	5.750	1.	.00760		+1220
+1169A	0.	1.		.150		+1174	PBEAM	1220	2	2.990		.00130		+1220A
PBEAM	1170	2	17.500	1.	.706	+1175	PBEAM	1221	2	.189	1.	.220872	3.000	+1231
+1170	NO	1.0	19.800		1.007	+1175A	+1221	NO	1.0	.614		.25.02095		+1231A
+1170A	0.	1.		.123		+1176	PBEAM	1222	2	.280	1.	.1.74280	2.000	+1232
PBEAM	1171	2	16.900	1.	.588	+1176A	+1222	NO	1.0	.315		.2.20872		+1232A
+1171	NO	1.0	17.500		.709	+1177	PBEAM	1223	2	.152	1.	.1.15839	.900	+1233
+1171A	0.	1.		.035		+1178	PBEAM	1223	2	.168	1.	.1.42177		+1233A
PBEAM	1181	2	0.341	100.	4.328	+1178A	+1223A	NO	1.0	.1018				
+1181	NO	1.0	1.0025		10.953	+1179	PBEAM	1224	2	.226	1.	.74641	.700	+1234
+1181A	0.	1.		.984		+1180	PBEAM	1224	2	.253		.93783		+1234A
PBEAM	1182	2	1.604	1.	75.00000	+1180A	+1224A	NO	1.0	.1127				
+1182	NO	1.0	1.365		5.30000	+1181	PBEAM	1225	2	.125	1.	.55802	.400	+1235
+1182A	0.	1.		.1611		+1181A	+1225	NO	1.0	.136		.65330		+1235A
PBEAM	1183	2	68.240	1.	70.00000	+1182	PBEAM	1226	2	.115	1.	.40738	.300	+1236
+1183	NO	1.0	53.180		18.30000	+1182A	+1226	NO	1.0	.125		.48321		+1236A
+1183A	0.	1.		.2481		+1183	PBEAM	1227	2	.0837				
PBEAM	1184	2	1.064	1.	18.30000	+1183A	+1227	NO	1.0	.1.75	1.	.28956	.150	+1237
+1184	NO	1.0	.715		5.30000	+1184	PBEAM	1228	2	.192		.34903		+1237A
+1184A	0.	1.		.3923		+1185	PBEAM	1228	2	.096	1.	.20137	.075	+1238
PBEAM	1185	2	.715	1.	5.30000	+1185A	+1228	NO	1.0	.105		.24515		+1238A
+1185	NO	1.0	.370		.65000	+1186	PBEAM	1229	2	.1370	1.	.00940	.900	+1243
+1185A	0.	1.		.6362		+1186	PBEAM	1229	2	.14740	1.	.01850	3.000	+1241
PBEAM	1186	2	22.130	1.	7.00000	+1186A	+1229	NO	1.0	.16.200		.26000		+1241A
+1186	NO	1.0	21.000		7.00000	+1187	PBEAM	1230	2	.16.200		.01850		+1242
+1186A	0.	1.		.0524		+1187A	PBEAM	1230	2	.120		.01400	2.000	+1242A
PBEAM	1187	2	21.000	1.	7.00000	+1188	PBEAM	1231	2	.13.370	1.	.00690		+1243
+1187	NO	1.0	16.200		.95800	+1188A	PBEAM	1231	2	.11.130	1.	.00450		+1243A
+1187A	0.	1.		.2581		+1189	PBEAM	1232	2	.11.130	1.	.00450	.400	+1244
PBEAM	1188	2	16.200	1.	.95000	+1189A	PBEAM	1232	2	.11.130	1.	.00450		+1244A
+1188	NO	1.0	10.900		.30000	+1190	PBEAM	1233	2	.11.130	1.	.00450		+1245
+1188A	0.	1.		.3911		+1190A	PBEAM	1233	2	.11.130	1.	.00450	.400	+1245A
PBEAM	1189	2	10.900	1.	.30000	+1191	PBEAM	1234	2	.11.130	1.	.00450		+1246
+1189	NO	1.0	.5690		.04000	+1191A	PBEAM	1234	2	.11.130	1.	.00450		+1246A
+1189A	0.	1.		.6281		+1192	PBEAM	1235	2	.11.130	1.	.00450	.400	+1247
PBEAM	1190	2	3.414	100.	1.	+1192A	PBEAM	1235	2	.11.130	1.	.00450		+1247A
+1190	NO	1.0	2.802		1.0	+1193	PBEAM	1236	2	.11.130	1.	.00450		+1248
+1190A	0.	1.		.197		+1193A	PBEAM	1236	2	.11.130	1.	.00450		+1248A
PBEAM	1191	2	18.680	1.	5.80000	+1194	PBEAM	1237	2	.11.130	1.	.00450		+1249
+1191	NO	1.0	18.680		5.80000	+1194A	PBEAM	1237	2	.11.130	1.	.00450		+1249A
+1191A	0.	1.		.0000		+1195	PBEAM	1238	2	.11.130	1.	.00450	.400	+1250
PBEAM	1192	2	18.680	1.	5.80000	+1195A	PBEAM	1238	2	.11.130	1.	.00450		+1250A
+1192	NO	1.0	14.740		.28300	+1196	PBEAM	1239	2	.11.130	1.	.00450		+1251
+1192A	0.	1.		.2358		+1196A	PBEAM	1239	2	.11.130	1.	.00450		+1251A
PBEAM	1193	2	14.740	1.	.28300	+1197	PBEAM	1240	2	.11.130	1.	.00450		+1252
+1193	NO	1.0	9.990		.09600	+1197A	PBEAM	1240	2	.11.130	1.	.00450		+1252A
+1193A	0.	1.		.3841		+1198	PBEAM	1241	2	.11.130	1.	.00450		+1253
PBEAM	1194	2	9.990	1.	.09600	+1198A	PBEAM	1241	2	.11.130	1.	.00450		+1253A
+1194	NO	1.0	.5250		.01400	+1199	PBEAM	1242	2	.11.130	1.	.00450		+1254
+1194A	0.	1.		.6220		+1199A	PBEAM	1242	2	.11.130	1.	.00450		+1254A
PBEAM	1195	2	35.960	1.	5.14100	+1199A	PBEAM	1242	2	.11.130	1.	.00450		+1255
+1195	NO	1.0	33.740		5.13000	+1200	PBEAM	1242	2	.11.130	1.	.00450		+1255A
+1195A	0.	1.		.0637		+1200A	PBEAM	1242	2	.11.130	1.	.00450		+1256
PBEAM	1196	2	33.740	1.	5.13000	+1200A	PBEAM	1243	2	.11.130	1.	.00450		+1257
+1196	NO	1.0	26.740		.22400	+1201	PBEAM	1243	2	.11.130	1.	.00450		+1258
+1196A	0.	1.		.2315		+1201A	PBEAM	1243	2	.11.130	1.	.00450		+1258A
PBEAM	1197	2	26.740	1.	.22400	+1202	PBEAM	1244	2	.11.130	1.	.00450		+1259
+1197	NO	1.0	18.100		.07510	+1202A	PBEAM	1244	2	.11.130	1.	.00450		+1259A
+1197A	0.	1.		.3854		+1203	PBEAM	1245	2	.11.130	1.	.00450		+1260
PBEAM	1198	2	18.100	1.	.07510	+1203A	PBEAM	1245	2	.11.130	1.	.00450		+1260A
+1198	NO	1.0	9.500		.01143	+1204	PBEAM	1245	2	.11.130	1.	.00450		+1261
+1198A	0.	1.		.6232		+1204A	PBEAM	1245	2	.11.130	1.	.00450		+1261A
PBEAM	1199	2	0.924	100.	.032	+1204A	PBEAM	1245	2	.11.130	1.	.00450		+1262
+1199	NO	1.0	.7535		.025	+1205	PBEAM	1245	2	.11.130	1.	.00450		+1262A
+1199A	0.	1.		.203		+1205A	PBEAM	1245	2	.11.130	1.	.00450		+1263
PBEAM	1200	2	15.070	1.	3.20000	+1205A	PBEAM	1245	2	.11.130	1.	.00450		+1263A
+1200	NO	1.0	15.070		3.20000	+1206	PBEAM	1245	2	.11.130	1.	.00450		+1264
+1200A	0.	1.		.0000		+1206A	PBEAM	1245	2	.11.130	1.	.00450		+1264A
PBEAM	1201	2	15.070	1.	3.20000	+1206A	PBEAM	1245	2	.11.130	1.	.00450		+1265
+1201	NO													

PBEAM	1263	2	4.750	1.	.00047	.900	+1263	PBEAM	2055	2	105.994	1.	.914	.001	+2055
+1263	NO	1.0	5.250		.00068		+1263A	PBEAM	2055	2	92.900	1.	.632		+2056
+1263A	O.	1.		-1.000				PBEAM	2056	2	92.900	1.	.632	.001	+2056
PBEAM	1264	2	4.260	1.	.00035	.700	+1264	PBEAM	2056	2	79.720	1.	.350		+2057
+1264	NO	1.0	4.750		.00047		+1264A	PBEAM	2057	2	79.720	1.	.310	.001	+2057
+1264A	O.	1.		-1.088				PBEAM	2057	2	64.600	1.	.204		+2058
PBEAM	1265	2	3.950	1.	.00023	.400	+1265	PBEAM	2058	2	64.600	1.	.204	.001	+2058
+1265	NO	1.0	4.260		.00035		+1265A	PBEAM	3026	2	1.896	1000.	10.	.001	+3026P
+1265A	O.	1.		-0.755				PBEAM	3026	2	1.896	1000.	10.	.001	+3026PA
PBEAM	1266	2	3.640	1.	.00017	.300	+1266	PBEAM	3026P	NO	1.	4.92			
+1266	NO	1.0	3.950		.00023		+1266A	PBEAM	3027	2	0.3	1000.	10.	.001	+3027P
+1266A	O.	1.		-0.0817				PBEAM	3027	2	0.3	1000.	10.	.001	+3027PA
PBEAM	1267	2	3.330	1.	.00011	.150	+1267	PBEAM	3027P	NO	1.	0.123			
+1267	NO	1.0	3.640		.00017		+1267A	PBEAM	3028	2	22.	1000.	10.	.001	+3028P
+1267A	O.	1.		-0.0890				PBEAM	3028	2	22.	1000.	10.	.001	+3028PA
PBEAM	1268	2	2.990	1.	.00008	.075	+1268	PBEAM	3028P	NO	1.	41.			
+1268	NO	1.0	3.330		.00011		+1268A	PBEAM	3029	2	22.	1000.	10.	.001	+3029P
+1268A	O.	1.		-0.1076				PBEAM	3029	2	22.	1000.	10.	.001	+3029PA
PBEAM	2001	2	2038.9591		2.060	.001	+2001	PBEAM	3081	2	23.11	999.	.01	.01	+3081P
+2001	NO	1.	3806.7001		19.530			PBEAM	3081	2	100.				+3081PA
PBEAM	2002	2	3806.7001		19.530	.001	+2002	PBEAM	3030	2	41.	1000.	10.	.001	+3030P
+2002	NO	1.	5574.4201		37.000			PBEAM	3030	2	41.	1000.	10.	.001	+3031P
PBEAM	2003	2	5574.4201		37.000	.001	+2003	PBEAM	3031	2	41.	1000.	10.	.0.	+3032P
+2003	NO	1.	3618.9001		18.660			PBEAM	3032	2	41.	1000.	10.	.0.	+3032PA
PBEAM	2004	2	3618.9001		18.660	.001	+2004	PBEAM	3032P	NO	1.				
+2004	NO	1.	1663.3351		.320			PBEAM	3081	2	23.11	999.	.01	.01	+3081P
PBEAM	2005	2	1429.5691		1.290	.001	+2005	PBEAM	3081P	NO	1.	100.			+3081PA
+2005	NO	1.	3214.8001		10.645			PBEAM	3082	2	100.	999.	.01	.01	+3082P
PBEAM	2006	2	3214.8001		10.645	.001	+2006	PBEAM	3082	2	22.	11.			+3082PA
+2006	NO	1.	4999.9951		20.000			PBEAM	3083	2	100.	999.	.01	.01	+3083P
PBEAM	2007	2	4999.9951		20.000	.001	+2007	PBEAM	3083P	NO	1.				+3083PA
+2007	NO	1.	3331.6651		11.600			PBEAM	3083PA	1.	.001				
PBEAM	2008	2	3331.6651		11.600	.001	+2008	PBEAM	3085	2	100.	999.	.01	.01	+3085P
+2008	NO	1.	1663.3351		3.200			PBEAM	3085	2	22.	100.	.001	.001	+3085PA
PBEAM	2009	2	1117.8811		.770	.001	+2009	PBEAM	3085P	NO	1.				+3085PA
+2009	NO	1.	2357.6401		.485			PBEAM	3086	2	100.	999.	.01	.01	+3086P
PBEAM	2010	2	2357.6401		.485	.001	+2010	PBEAM	3086	2	22.	11.			+3086PA
+2010	NO	1.	3597.3991		.200			PBEAM	3087	2	100.	999.	.01	.01	+3087P
PBEAM	2011	2	3597.3991		.200	.001	+2011	PBEAM	3087P	NO	1.				+3087PA
+2011	NO	1.	2467.5301		.650			PBEAM	3088	2	22.	.001	999.	.001	+3088P
PBEAM	2012	2	2467.5301		.650	.001	+2012	PBEAM	3088	2	22.	.001	999.	.001	+3088PA
+2012	NO	1.	1337.6611		1.100			PBEAM	3088P	NO	1.				+3088PA
PBEAM	2013	2	859.140	1.	.294	.001	+2013	PBEAM	3089	2	22.	.001	10.	.001	+3089P
+2013	NO	1.	1864.8001		.247			PBEAM	3089	2	22.	.001	16.17	.15.	+3089PA
PBEAM	2014	2	1864.8001		.247	.001	+2014	PBEAM	3090	2	3.3	.001	5.88	.4.5	+3090P
+2014	NO	1.	2870.5271		.200			PBEAM	3090	2	.726				+3090PA
PBEAM	2015	2	2870.5271		.200	.001	+2015	PBEAM	3090P	NO	1.				+3090PA
+2015	NO	1.	1965.2331		.470			PBEAM	3090PA	1.	.001				
PBEAM	2016	2	1965.2331		.470	.001	+2016	PBEAM	3091	2	.726				+3091P
+2016	NO	1.	1059.9391		.740			PBEAM	3091	2	.726	.001	5.88	.4.5	+3091PA
PBEAM	2017	2	617.482	1.	.108	.001	+2017	PBEAM	3091P	NO	1.				+3091PA
+2017	NO	1.	1398.2001		.104			PBEAM	3092	2	.726	.001	16.17	.15.	+3092P
PBEAM	2018	2	1398.2001		.104	.001	+2018	PBEAM	3092	2	100.	80.	.001	.01	+3092PA
+2018	NO	1.	2178.8191		.100			PBEAM	3093	2	.726	.001	5.88	.4.5	+3093P
PBEAM	2019	2	2178.8191		.100	.001	+2019	PBEAM	3093	2	.726	.001	5.88	.4.5	+3093PA
+2019	NO	1.	1488.0001		.120			PBEAM	3093P	NO	1.	3.3			
PBEAM	2020	2	1488.0001		.120	.001	+2020	PBEAM	3094	2	.726	.001	5.88	.4.5	+3094P
+2020	NO	1.	797.200	1.	.140			PBEAM	3094	2	100.	10.21	.001	.01	+3094PA
PBEAM	2021	2	454.845	1.	.100	.001	+2021	PBEAM	3094P	NO	1.				+3094PA
+2021	NO	1.	832.800	1.	.110			PBEAM	3095	2	100.	80.	.001	.01	+3095P
PBEAM	2022	2	832.800	1.	.110	.001	+2022	PBEAM	3095	2	100.	80.	.001	.01	+3095PA
+2022	NO	1.	1210.7881		.120			PBEAM	3095P	NO	1.				+3095PA
PBEAM	2023	2	1210.7881		.120	.001	+2023	PBEAM	3096	2	100.	10.21	.001	.01	+3096P
+2023	NO	1.	852.600	1.	.126			PBEAM	3096	2	100.	10.21	.001	.01	+3096PA
PBEAM	2024	2	852.600	1.	.126	.001	+2024	PBEAM	3096P	NO	1.				+3096PA
+2024	NO	1.	1494.505	1.	.131			PBEAM	3097	2	100.	333.	.1	.01	+3097P
PBEAM	2025	2	203.896	1.	.44.200	.001	+2025	PBEAM	3097	2	22.	333.	.001	.01	+3097PA
+2025	NO	1.	173.400	1.	.22.970			PBEAM	3097P	NO	1.				+3097PA
PBEAM	2026	2	173.400	1.	.22.970	.001	+2026	PBEAM	3098	2	100.	999.	999.	.01	+3391P
+2026	NO	1.	142.957	1.	.1740			PBEAM	3098	2	60.	99999.	99999.	.01	+3405P
PBEAM	2027	2	142.957	1.	.1740	.001	+2027	PBEAM	3098P	NO	1.				+3405PA
+2027	NO	1.	127.400	1.	.1339			PBEAM	3099	2	100.	333.	.1	.01	+3099P
PBEAM	2028	2	127.400	1.	.1339	.001	+2028	PBEAM	3100	2	100.	999.	999.	.20.	+3100P
+2028	NO	1.	111.788	1.	.937			PBEAM	3391	2	60.	99999.	99999.	.01	+3391P
PBEAM	2029	2	111.788	1.	.937	.001	+2029	PBEAM	3405	2	60.	99999.	99999.	.01	+3405P
+2029	NO	1.	98.900	1.	.714			PBEAM	3405P	NO	1.				+3405PA
PBEAM	2030	2	98.900	1.	.714	.001	+2030	PBEAM	3407	2	60.	99999.	30.11	.01	+3407P
+2030	NO	1.	85.914	1.	.490			PBEAM	3407	2	60.	99999.	30.11	.01	+3407PA
PBEAM	2031	2	85.914	1.	.490	.001	+2031	PBEAM	3407P	NO	1.				+3407PA
+2031	NO	1.	73.800	1.	.395			PBEAM	3409	2	60.	99999.	99999.	.249750.	+3409P
PBEAM	2032	2	73.800	1.	.395	.001	+2032	PBEAM	5002	2	.920	736.000	606.050	.610.	+5002
+2032	NO	1.	61.748	1.	.300			PBEAM	5002	2	.920	736.000	606.050	.610.	+5002A
PBEAM	2033	2	61.748	1.	.300	.001	+2033	PBEAM	5051	2	4.140	6240.0003625.000	.5250.	.5250.	+5051
+2033	NO	1.	53.600	1.	.205			PBEAM	5051	2	4.140	8000.0004172.000	.5250.	.5250.	+5051A
PBEAM	2034	2	53.600	1.	.205	.001	+2034	PBEAM	5051A	0.	1.				
+2034	NO	1.	45.484	1.	.110			PBEAM	5052	2	4.140	8000.0004245.000	.5250.	.5250.	+5053
PBEAM	2035	2	45.484	1.	.110	.001	+2035	PBEAM	5052	2	4.140	8000.0004245.000	.5250.	.5250.	+5053A
+2035	NO	1.	257.442	1.	.61.000			PBEAM	5053	2	4.140	8000.0004245.000	.5250.	.5250.	+5053A
PBEAM	2036	2	257.442	1.	.61.000</td										

PSHEAR	655	1	.042	RBAR	115	94	1094	123456	123
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PSHEAR	658	1	.08583	RBAR	118	114	2114	123456	123
PSHEAR	659	1	.090	RBAR	119	121	1121	123456	123
PSHEAR	660	1	.0635	RBAR	120	121	2121	123456	123
PSHEAR	3105	2	.20942	RBAR	121	34	35	123456	123
PSHELL	601	601	.240	RBAR	122	40	41	123456	123
PSHELL	602	601	.296	RBAR	123	48	49	123456	123
PSHELL	603	601	.368	RBAR	124	57	58	123456	123
PSHELL	604	601	.378	RBAR	125	69	70	123456	123
PSHELL	605	601	.274	RBAR	126	82	83	123456	123
PSHELL	606	606	.247	RBAR	127	115	116	123456	123
PSHELL	607	606	.252	RBAR	128	33	31	123456	123
PSHELL	608	606	.341	RBAR	129	39	37	123456	
PSHELL	609	606	.438	RBAR	130	47	45	123456	
PSHELL	610	606	.410	RBAR	131	56	54	123456	
PSHELL	611	606	.279	RBAR	132	68	66	123456	
PSHELL	612	5	.252	RBAR	133	81	121	123456	123
PSHELL	613	5	.323	RBAR	215	275	1275	123456	123
PSHELL	614	5	.384	RBAR	216	275	2275	123456	123
PSHELL	615	5	.313	RBAR	217	276	1276	123456	123
PSHELL	616	5	.234	RBAR	218	276	2276	123456	123
PSHELL	617	5	.271	RBAR	219	280	1280	123456	123
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PSHELL	619	5	.292	RBAR	221	290	1290	123456	123
PSHELL	620	5	.271	RBAR	222	290	2290	123456	123
PSHELL	621	5	.210	RBAR	223	292	1292	123456	123
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PSHELL	624	5	.253	RBAR	226	293	2293	123456	123
PSHELL	625	5	.194	RBAR	227	464	1464	123456	123
PSHELL	626	6	.255	RBAR	228	464	2464	123456	123
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PSHELL	629	5	.195	RBAR	231	466	1466	123456	123
PSHELL	630	5	.187	RBAR	232	466	2466	123456	123
PSHELL	631	5	.187	RBAR	233	467	1467	123456	123
PSHELL	632	5	.226	RBAR	234	467	2467	123456	123
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PSHELL	634	5	.191	RBAR	236	290	291	123456	123
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PSHELL	636	2	.214	RBAR	238	298	195	123456	12456
PSHELL	637	2	.213	RBAR	239	284	196	123456	12456
PSHELL	638	2	.214	RBAR	1311	19	1019	123456	123
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PSHELL	643	2	.205	RBAR	1315	21	1021	123456	123
PSHELL	644	2	.205	RBAR	1316	21	2021	123456	123
PSHELL	645	2	.200	RBAR	1317	22	1022	123456	123
PSHELL	647	2	.400	RBAR	1318	22	2022	123456	123
PSHELL	648	2	.400	RBAR	1319	23	1023	123456	123
PSHELL	649	2	.400	RBAR	1320	23	2023	123456	123
PSHELL	661	1	.219	RBAR	1321	24	1024	123456	123
PSHELL	662	1	.169	RBAR	1322	24	2024	123456	123
PSHELL	663	1	.116	RBAR	1323	25	1025	123456	123
PSHELL	664	1	.207	RBAR	1324	25	2025	123456	123
PSHELL	665	1	.158	RBAR	1325	26	1026	123456	123
PSHELL	666	1	.104	RBAR	1326	26	2026	123456	123
PSHELL	667	1	.190	RBAR	1327	27	1027	123456	123
PSHELL	668	1	.1454	RBAR	1328	27	2027	123456	123
PSHELL	669	1	.097	RBAR	1329	29	1029	123456	123
PSHELL	670	1	.173	RBAR	1330	29	2029	123456	123
PSHELL	671	1	.133	RBAR	1331	30	1030	123456	123
PSHELL	672	1	.089	RBAR	1332	30	2030	123456	123
PSHELL	673	1	.156	RBAR	1333	32	1032	123456	123
PSHELL	674	1	.123	RBAR	1334	32	2032	123456	123
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PSHELL	680	1	.107	RBAR	1340	39	2039	123456	123
PSHELL	681	1	.073	RBAR	1341	44	1044	123456	123
PSHELL	682	1	.127	RBAR	1342	44	2044	123456	123
PSHELL	683	1	.100	RBAR	1343	46	1046	123456	123
PSHELL	684	1	.068	RBAR	1344	46	2046	123456	123
PSHELL	701	701	.175	RBAR	1345	47	1047	123456	123
PSHELL	702	702	.121	RBAR	1316	47	2047	123456	123
PSHELL	703	703	.093	RBAR	1347	51	1051	123456	123
PSHELL	704	704	.085	RBAR	1348	51	2051	123456	123
PSHELL	705	705	.074	RBAR	1349	52	1052	123456	123
PSHELL	706	706	.230	RBAR	1350	52	2052	123456	123
PSHELL	707	707	.132	RBAR	1351	53	1053	123456	123
PSHELL	708	708	.097	RBAR	1352	53	2053	123456	123
PSHELL	709	709	.085	RBAR	1353	55	1055	123456	123
PSHELL	710	710	.072	RBAR	1354	55	2055	123456	123
REBAR	23	283	407	123456	1355	56	1056	123456	123
REBAR	24	281	409	123456	1356	56	2056	123456	123
REBAR	91	31	1031	123456	1357	60	1060	123456	123
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REBAR	94	34	2034	123456	1360	61	2061	123456	123
REBAR	95	37	1037	123456	1361	62	1062	123456	123
REBAR	96	37	2037	123456	1362	62	2062	123456	123
REBAR	97	40	1040	123456	1363	63	1063	123456	123
REBAR	98	40	2040	123456	1364	63	2063	123456	123
REBAR	99	45	1045	123456	1365	64	1064	123456	123
REBAR	100	45	2045	123456	1366	64	2064	123456	123
REBAR	101	48	1048	123456	1367	65	1065	123456	123
REBAR	102	48	2048	123456	1368	65	2065	123456	123
REBAR	103	54	1054	123456	1369	67	1067	123456	123
REBAR	104	54	2054	123456	1370	67	2067	123456	123
REBAR	105	57	1057	123456	1371	68	1068	123456	123
REBAR	106	57	2057	123456	1372	68	2068	123456	123
REBAR	107	66	1066	123456	1373	72	1072	123456	123
REBAR	108	66	2066	123456	1374	72	2072	123456	123
REBAR	109	69	1069	123456	1375	73	1073	123456	123
REBAR	110	69	2069	123456	1376	73	2073	123456	123
REBAR	111	79	1079	123456	1377	74	1074	123456	123
REBAR	112	79	2079	123456	1378	74	2074	123456	123
REBAR	113	82	1082	123456	1379	75	1075	123456	123
REBAR	114	82	2082	123456	1380	75	2075	123456	123

RBAR	1381	76	1076	123456	123	RBAR	1517	104	1104	123456	123
RBAR	1382	76	2076	123456	123	RBAR	1518	104	2104	123456	123
RBAR	1383	77	1077	123456	123	RBAR	1519	105	1105	123456	123
RBAR	1384	77	2077	123456	123	RBAR	1520	105	2105	123456	123
RBAR	1385	78	1078	123456	123	RBAR	1521	106	1106	123456	123
RBAR	1386	78	2078	123456	123	RBAR	1522	106	2106	123456	123
RBAR	1387	80	1080	123456	123	RBAR	1523	107	1107	123456	123
RBAR	1388	80	2080	123456	123	RBAR	1524	107	2107	123456	123
RBAR	1389	81	1081	123456	123	RBAR	1525	108	1108	123456	123
RBAR	1390	81	2081	123456	123	RBAR	1526	108	2108	123456	123
RBAR	1391	85	1085	123456	123	RBAR	1527	109	1109	123456	123
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RBAR	1393	86	1086	123456	123	RBAR	1529	110	1110	123456	123
RBAR	1394	86	2086	123456	123	RBAR	1530	110	2110	123456	123
RBAR	1395	87	1087	123456	123	RBAR	1531	111	1111	123456	123
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RBAR	1407	143	1143	123456	123	RBAR	1535	113	1113	123456	123
RBAR	1408	143	2143	123456	123	RBAR	1536	113	2113	123456	123
RBAR	1409	181	1181	123456	123	RBAR	1537	125	1125	123456	123
RBAR	1410	181	2181	123456	123	RBAR	1538	125	2125	123456	123
RBAR	1411	182	1182	123456	123	RBAR	1539	126	1126	123456	123
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RBAR	1413	183	1183	123456	123	RBAR	1541	127	1127	123456	123
RBAR	1414	183	2183	123456	123	RBAR	1542	127	2127	123456	123
RBAR	1415	184	1184	123456	123	RBAR	1543	128	1128	123456	123
RBAR	1416	184	2184	123456	123	RBAR	1544	128	2128	123456	123
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RBAR	1418	185	2185	123456	123	RBAR	1546	129	2129	123456	123
RBAR	1419	186	1186	123456	123	RBAR	1547	130	1130	123456	123
RBAR	1420	186	2186	123456	123	RBAR	1548	130	2130	123456	123
RBAR	1421	187	1187	123456	123	RBAR	1549	131	1131	123456	123
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RBAR	1423	188	1188	123456	123	RBAR	1551	132	1132	123456	123
RBAR	1424	188	2188	123456	123	RBAR	1552	132	2132	123456	123
RBAR	1425	189	1189	123456	123	RBAR	1553	133	1133	123456	123
RBAR	1426	189	2189	123456	123	RBAR	1554	133	2133	123456	123
RBAR	1427	190	1190	123456	123	RBAR	1555	134	1134	123456	123
RBAR	1428	190	2190	123456	123	RBAR	1556	134	2134	123456	123
RBAR	1429	191	1191	123456	123	RBAR	1557	135	1135	123456	123
RBAR	1430	191	2191	123456	123	RBAR	1558	135	2135	123456	123
RBAR	1431	192	1192	123456	123	RBAR	1559	136	1136	123456	123
RBAR	1432	192	2192	123456	123	RBAR	1560	136	2136	123456	123
RBAR	1433	193	1193	123456	123	RBAR	1561	137	1137	123456	123
RBAR	1434	193	2193	123456	123	RBAR	1562	137	2137	123456	123
RBAR	1435	242	1242	123456	123	RBAR	1563	138	1138	123456	123
RBAR	1436	242	2242	123456	123	RBAR	1564	138	2138	123456	123
RBAR	1437	243	1243	123456	123	RBAR	1565	139	1139	123456	123
RBAR	1438	243	2243	123456	123	RBAR	1566	139	2139	123456	123
RBAR	1439	244	1244	123456	123	RBAR	1567	140	1140	123456	123
RBAR	1440	244	2244	123456	123	RBAR	1568	140	2140	123456	123
RBAR	1441	245	1245	123456	123	RBAR	1569	141	1141	123456	123
RBAR	1442	245	2245	123456	123	RBAR	1570	141	2141	123456	123
RBAR	1451	1	1001	123456	123	RBAR	1571	142	1142	123456	123
RBAR	1452	1	2001	123456	123	RBAR	1572	142	2142	123456	123
RBAR	1453	2	1002	123456	123	RBAR	2235	501	1501	123456	123
RBAR	1454	2	2002	123456	123	RBAR	2236	501	2501	123456	123
RBAR	1455	3	1003	123456	123	RBAR	2237	502	1502	123456	123
RBAR	1456	3	2003	123456	123	RBAR	2238	502	2502	123456	123
RBAR	1457	4	1004	123456	123	RBAR	2239	503	1503	123456	123
RBAR	1458	4	2004	123456	123	RBAR	2240	503	2503	123456	123
RBAR	1459	5	1005	123456	123	RBAR	2241	504	1504	123456	123
RBAR	1460	5	2005	123456	123	RBAR	2242	504	2504	123456	123
RBAR	1461	6	1006	123456	123	RBAR	2243	505	1505	123456	123
RBAR	1462	6	2006	123456	123	RBAR	2244	505	2505	123456	123
RBAR	1463	7	1007	123456	123	RBAR	2245	506	1506	123456	123
RBAR	1464	7	2007	123456	123	RBAR	2246	506	2506	123456	123
RBAR	1465	8	1008	123456	123	RBAR	2247	507	1507	123456	123
RBAR	1466	8	2008	123456	123	RBAR	2248	507	2507	123456	123
RBAR	1467	10	1010	123456	123	RBAR	2249	508	1508	123456	123
RBAR	1468	10	2010	123456	123	RBAR	2250	508	2508	123456	123
RBAR	1469	12	1012	123456	123	RBAR	2251	509	1509	123456	123
RBAR	1470	12	2012	123456	123	RBAR	2252	509	2509	123456	123
RBAR	1471	14	1014	123456	123	RBAR	2253	510	1510	123456	123
RBAR	1472	14	2014	123456	123	RBAR	2254	510	2510	123456	123
RBAR	1473	16	1016	123456	123	RBAR	2255	511	1511	123456	123
RBAR	1474	16	2016	123456	123	RBAR	2256	511	2511	123456	123
RBAR	1475	18	1018	123456	123	RBAR	2257	512	1512	123456	123
RBAR	1476	18	2018	123456	123	RBAR	2258	512	2512	123456	123
RBAR	1477	173	1173	123456	123	RBAR	2259	513	1513	123456	123
RBAR	1478	173	2173	123456	123	RBAR	2260	513	2513	123456	123
RBAR	1479	174	1174	123456	123	RBAR	2261	514	1514	123456	123
RBAR	1480	174	2174	123456	123	RBAR	2262	514	2514	123456	123
RBAR	1481	175	1175	123456	123	RBAR	2263	515	1515	123456	123
RBAR	1482	175	2175	123456	123	RBAR	2264	515	2515	123456	123
RBAR	1483	176	1176	123456	123	RBAR	2265	516	1516	123456	123
RBAR	1484	176	2176	123456	123	RBAR	2266	516	2516	123456	123
RBAR	1485	177	1177	123456	123	RBAR	2267	517	1517	123456	123
RBAR	1486	177	2177	123456	123	RBAR	2268	517	2517	123456	123
RBAR	1487	178	1178	123456	123	RBAR	2269	518	1518	123456	123
RBAR	1488	178	2178	123456	123	RBAR	2270	518	2518	123456	123
RBAR	1489	179	1179	123456	123	RBAR	2271	519	1519	123456	123
RBAR	1490	179	2179	123456	123	RBAR	2272	519	2519	123456	123
RBAR	1491	180	1180	123456	123	RBAR	2273	520	1520	123456	123
RBAR	1492	180	2180	123456	123	RBAR	2274	520	2520	123456	123
RBAR	1493	194	1194	123456	123	RBAR	2275	521	1521	123456	123
RBAR	1494	194	2194	123456	123	RBAR	2276	521	2521	123456	123
RBAR	1501	96	1096	123456	123	RBAR	2277	522	1522	123456	123
RBAR	1502	96	2096	123456	123	RBAR	2278	522	2522	123456	123
RBAR	1503	97	1097	123456	123	RBAR	2279	523	1523	123456	123
RBAR	1504	97	2097	123456	123	RBAR	2280	523	2523	123456	123
RBAR	1505	98	1098	123456	123	RBAR	2281	524	1524	123456	123

RBAR	3111	3047	3065	123456	123		SPC1	5	456	1125	1126	1127				
RBAR	3112	3048	3066	123456	123		SPC1	5	456	1128	1129	1130	1131	1132	1133	
RBAR	3113	3053	3067	123456	123		SPC1	5	456	1134	1135	1136	1137	1138	1139	
RBAR	3114	3055	3068	123456	123		SPC1	5	456	1140	1141	1142				
RBAR	3115	3047	3069	123456	123		SPC1	5	456	1143						
RBAR	3116	3048	3070	123456	123		SPC1	5	456	1178	1179	1180	1194			
RBAR	3419	3203	182	123456	123		SPC1	5	456	1181	THRU	1193				
RBAR	3420	3203	183	123456	123		SPC1	5	456	1233	2233					
RBAR	3421	3205	185	123456	123		SPC1	5	456	1242	1243	1244	1245			
RBAR	3422	3205	186	123456	123		SPC1	5	456	1251	THRU	1266				
RBAR	3423	3201	3204	123456	5		SPC1	5	456	1292	1293	1464	1465	1466	1467	
RBAR	3424	3204	3207	123456	3		SPC1	5	456	1501	THRU	1526				
RBAR	3425	3208	3212	123456	3		SPC1	5	456	2001	2002	2003	2004	2005	2006	
RBAR	3426	3208	3209	123456	123		SPC1	5	456	2007	2008	2010	2012	2014	2016	
SPC1	3	1	359	360	361	362	364	367		SPC1	5	456	2018	2173	2174	2175
SPC1	3	1	368	369	370	371	373	381		SPC1	5	456	2019	THRU	2027	
SPC1	3	1	383	384	385	386	387	389		SPC1	5	456	2029	2030	2032	2033
SPC1	3	1	390	391	392	393	408		SPC1	5	456	2031	2034	2037	2040	
SPC1	3	156	36	42	50	437	59	431		SPC1	5	456	2044	2046	2047	2051
SPC1	3	156	71	84	298	286	117	285		SPC1	5	456	2054	2057	2056	2069
SPC1	3	156	163	164	153	154	155	156		SPC1	5	456	2055	2056	2060	2061
SPC1	3	156	267	268	458	459	459			SPC1	5	456	2064	2065	2067	2068
SPC1	3	156	283	284	282	281	405			SPC1	5	456	2074	2075	2076	2077
SPC1	4	234	36	42	50	437	59	431		SPC1	5	456	2079	2114	2275	2276
SPC1	4	234	71	84	298	286	117	285		SPC1	5	456	2081	2085	2086	2087
SPC1	4	234	163	164	153	154	155	156		SPC1	5	456	2094	2114	2121	
SPC1	4	234	267	268	458	459				SPC1	5	456	2096	2097	2098	2099
SPC1	4	234	283	284	282	281	405			SPC1	5	456	2102	2103	2104	2105
SPC1	5	4	3022							SPC1	5	456	2108	2109	2110	2111
SPC1	5	4	3047							SPC1	5	456	2125	2126	2127	
SPC1	5	456	251	256	261	262	266			SPC1	5	456	2128	2129	2130	2131
SPC1	5	456	1001	1002	1003	1004	1005	1006		SPC1	5	456	2134	2135	2136	2137
SPC1	5	456	1007	1008	1010	1012	1014	1016		SPC1	5	456	2140	2141	2142	
SPC1	5	456	1018	1173	1174	1175	1176	1177		SPC1	5	456	2178	2179	2180	2194
SPC1	5	456	1019	THRU	1027					SPC1	5	456	2181	THRU	2193	
SPC1	5	456	1029	1030	1032	1033	1038	1039		SPC1	5	456	2242	2243	2244	2245
SPC1	5	456	1031	1034	1037	1040	1045	1048		SPC1	5	456	2251	THRU	2266	
SPC1	5	456	1044	1046	1047	1051	1052	1053		SPC1	5	456	2292	2293	2164	2465
SPC1	5	456	1054	1057	1066	1069	1079	1082		SPC1	5	456	2501	THRU	2526	
SPC1	5	456	1055	1056	1060	1061	1062	1063		SPC1	5	456	3063	3064	3065	3066
SPC1	5	456	1064	1065	1067	1069	1072	1073		SPC1	5	456	3067	3068	3069	3070
SPC1	5	456	1074	1075	1076	1077	1078	1080		SPC1	5	123456	701	702	703	
SPC1	5	456	1079	1114	1275	1276	1280	1290		SPCADD	1	3	5			
SPC1	5	456	1081	1085	1086	1087	1088			SPCADD	2	4	5			
SPC1	5	456	1094	1114	1121					SUPPORT	42	156				
SPC1	5	456	1096	1097	1098	1099	1100	1101		ENDDATA						
SPC1	5	456	1102	1103	1104	1105	1106	1107								
SPC1	5	456	1108	1109	1110	1111	1112	1113								

## Appendix C. Structural Finite Element Data for Nontypical LCO Case

```

ID LMTAS BLOCK 40 F-16 FLUTTER FEM NONTYPICAL LCO CASE
SOL 103
TIME 20
S
CEND
$TITLE=F-16 1/2 AIRPLANE FINITE ELEMENT MODEL FOR FLUTTER ANALYSIS
$SUBT1=ANTI-SYMMETRIC CENTERLINE BOUNDARY CONDITIONS // FULL XWING FUEL
$LABEL=CONFIG 5 = MA41
$DISP=ALL
$ECHO=SORT
$ DMIG VERTICAL TAIL STIFFNESS MATRIX
$K2GG=VTAIL
$ EIGENVALUE EXTRACTION
$METHOD=1
$ SYMMETRIC B.C. / SPC=2 FOR ANTSYMMETRIC
$SPC=2
$ SET 203022=GRIDS USED IN FLUTTER ANALYSIS.
$ ADD GRIDS 801 THROUGH 814 FOR DYNAMIC RESPONSE.
$SET 203022= 2, 3, 4, 5, 6,
9, 11, 13, 15, 17,
19, 20, 21, 26, 29,
33, 39, 44, 47, 51,
52, 53, 56, 60, 61,
62, 64, 65, 68, 72,
73, 74, 75, 77, 78,
81, 85, 86, 87, 89,
90, 91, 92, 93, 95,
102, 103, 104, 105, 106,
107, 108, 109, 110, 111,
112, 113, 122, 123, 124,
128, 129, 130, 131, 132,
133, 3004, 3006, 3009   $ AIM-9/16S200 OR 16S200 ON TIP
$ GENERATE BUT DO NOT PRINT-
$ EIGENVECTORS FOR FLUTTER ANALYSIS
$PRINT-
$ A-SET EIGENVECTORS FOR INSPECTION
$OUTPUT(PLOT)
$SCALE=1.8
$PAPER SIZE=26. BY 20.
$ SET 10=ELEMENTS USED IN MODE PLOTS
$ FUSELAGE CENTERLINE
$SET 10= 1 THRU 26,
$ WING BOX
1001 THRU 1005,
1007,1010 THRU 1013,
1020,1023 THRU 1025,
1031,1034,1036,1043,1045,
1046,1048 THRU 1054,
1056 THRU 1062,
1071 THRU 1074,
1078,1079,1080,
1086 THRU 1090,
1099,1100,1101,
1075,1076,1077,
1081 THRU 1085,
1091 THRU 1097,
1102 THRU 1111,
1116 THRU 1125,
1126,1127,1128,
$ LEADING EDGE FLAP / 1258 ACTUATOR
1131 THRU 1134,
1136,1137,1138,
1140,1141,1142,
1144,1145,1146,
1148 THRU 1151,
1152 THRU 1171,
$ FLAPERON
1181 THRU 1185,
1187 THRU 1189,
1190 THRU 1194,
1196 THRU 1203,
1205 THRU 1207,
1209 THRU 1220,
1231 THRU 1236,
1251 THRU 1258,
1261 THRU 1268,
$ HORIZONTAL TAIL
2001 THRU 2058,
$ VERTICAL TAIL
2401 THRU 2460,
$ 16S200 // STATION 1,9
3003 THRU 3009,
$ AIM-9L // STATION 1,9
3014,3015
$ MAXIMUM DEFORMATION 35.
AXES MX,MY,Z
VIEW 60.0,30.,0.
FIND SCALE ORIGIN 10 SET 10
PLOT MODAL DEF0 0 SET 10 ORIGIN 10
S
$ BEGIN BULK
ASET 3500 123456
ASET 3501 123456

```

CBEAM	4	4	154	155	1.	0.	0.		CBEAM	1026	1026	187	188	1.	0.	0.	+1026BM
CBEAM	5	5	155	156	1.	0.	0.		CBEAM	1027	1027	188	189	1.	0.	0.	
CBEAM	6	6	266	36	1.	0.	0.		CBEAM	1028	1028	189	190	1.	0.	0.	
CBEAM	7	7	36	42	1.	0.	0.		CBEAM	1029	1029	190	191	1.	0.	0.	
CBEAM	8	8	42	50	1.	0.	0.		CBEAM	1031	1031	26	52	1.	0.	0.	
CBEAM	9	9	50	437	1.	0.	0.		CBEAM	1033	1033	25	52	1.	0.	0.	
CBEAM	10	10	437	59	1.	0.	0.		CBEAM	1034	1034	52	64	1.	0.	0.	
CBEAM	11	11	59	431	1.	0.	0.		CBEAM	1035	1035	64	245	1.	0.	0.	
CBEAM	12	12	431	71	1.	0.	0.		CBEAM	1036	1036	64	77	1.	0.	0.	
CBEAM	13	13	71	84	1.	0.	0.		CBEAM	1037	1037	245	77	1.	0.	0.	
CBEAM	14	14	84	298	1.	0.	0.		CBEAM	1038	1038	192	193	1.	0.	0.	
CBEAM	15	15	298	286	1.	0.	0.		CBEAM	1039	1039	193	63	1.	0.	0.	
CBEAM	16	16	286	117	1.	0.	0.		CBEAM	1040	1040	63	245	1.	0.	0.	
CBEAM	17	17	117	285	1.	1.	0.		CBEAM	1041	1041	245	76	1.	0.	0.	
CBEAM	18	18	285	283	1.	1.	0.		CBEAM	1043	1043	24	51	1.	0.	0.	
CBEAM	19	19	283	284	1.	1.	0.		CBEAM	1045	1045	23	51	1.	0.	0.	
CBEAM	20	20	284	282	1.	1.	0.		CBEAM	1046	1046	51	62	1.	0.	0.	
CBEAM	21	21	282	281	1.	1.	0.		CBEAM	1047	1047	22	62	1.	0.	0.	
CBEAM	22	22	281	405	1.	0.	0.		CBEAM	1048	1048	62	244	1.	0.	0.	
CBEAM	31	31	36	35	1.	1.	0.		CBEAM	1049	1049	244	75	1.	0.	0.	
CBEAM	32	32	42	41	1.	1.	0.		CBEAM	1050	1050	75	88	1.	0.	0.	+1050BM
CBEAM	33	33	50	49	1.	1.	0.		CBEAM	1051	1051	21	61	1.	0.	0.	
CBEAM	34	34	59	58	1.	1.	0.		CBEAM	1052	1052	61	243	1.	0.	0.	
CBEAM	35	35	71	70	1.	1.	0.		CBEAM	1053	1053	243	74	1.	0.	0.	+1053BM
CBEAM	36	36	84	83	1.	1.	0.		+1053BM								
CBEAM	37	37	117	116	1.	1.	0.		CBEAM	1054	1054	74	87	1.	0.	0.	+1054BM
CBEAM	38	38	34	31	1.	1.	0.		CBEAM	1056	1056	20	60	1.	0.	0.	
CBEAM	39	39	40	37	1.	1.	0.		CBEAM	1057	1057	60	242	1.	0.	0.	
CBEAM	40	40	48	45	1.	1.	0.		CBEAM	1058	1058	242	73	1.	0.	0.	+1058BM
CBEAM	41	41	57	54	1.	1.	0.		CBEAM	1059	1059	73	86	1.	0.	0.	+1059BM
CBEAM	42	42	69	66	1.	1.	0.		CBEAM	1060	1060	19	143	1.	0.	0.	
CBEAM	43	43	82	94	1.	1.	0.		CBEAM	1061	1061	143	72	1.	0.	0.	
CBEAM	44	44	94	118	1.	1.	0.		CBEAM	1062	1062	72	85	1.	0.	0.	+1062BM
CBEAM	45	45	118	121	1.	1.	0.		CBEAM	1071	1071	33	32	0.	1.	0.	
CBEAM	46	46	115	79	1.	1.	0.		CBEAM	1072	1072	32	30	0.	1.	0.	
CBEAM	47	47	79	120	1.	1.	0.		CBEAM	1073	1073	30	181	0.	1.	0.	
CBEAM	48	48	120	114	1.	1.	0.		CBEAM	1074	1074	181	29	0.	1.	0.	
CBEAM	49	49	31	37	1.	1.	0.	+49BM	CBEAM	1075	1075	39	38	0.	1.	0.	
+49BM									CBEAM	1076	1076	38	182	0.	1.	0.	
CBEAM	50	50	37	45	1.	1.	0.		CBEAM	1077	1077	182	29	0.	1.	0.	
CBEAM	51	51	45	54	1.	1.	0.		CBEAM	1078	1078	29	27	0.	1.	0.	
CBEAM	52	52	54	66	1.	1.	0.		CBEAM	1079	1079	27	187	0.	1.	0.	
CBEAM	53	53	66	121	1.	1.	0.		CBEAM	1080	1080	187	26	0.	1.	0.	
+53BM									CBEAM	1081	1081	47	46	0.	1.	0.	
CBEAM	54	54	121	114	1.	1.	0.		CBEAM	1082	1082	46	183	0.	1.	0.	
+54BM									CBEAM	1083	1083	183	44	0.	1.	0.	
CBEAM	55	55	118	119	1.	1.	0.		CBEAM	1084	1084	44	188	0.	1.	0.	
CBEAM	56	56	119	120	1.	1.	0.		CBEAM	1085	1085	183	26	0.	1.	0.	
CBEAM	57	57	94	79	1.	1.	0.		CBEAM	1086	1086	26	25	0.	1.	0.	
CBEAM	141	141	467	274	1.	1.	0.		CBEAM	1087	1087	25	192	0.	1.	0.	
CBEAM	142	142	274	465	1.	1.	0.		CBEAM	1088	1088	192	24	0.	1.	0.	
CBEAM	143	143	465	275	1.	1.	0.		CBEAM	1089	1089	24	23	0.	1.	0.	
CBEAM	144	144	275	278	1.	1.	0.		CBEAM	1090	1090	23	22	0.	1.	0.	
CBEAM	145	145	278	280	1.	1.	0.		CBEAM	1091	1091	56	55	0.	1.	0.	
CBEAM	146	146	280	292	1.	1.	0.		CBEAM	1092	1092	55	184	0.	1.	0.	
CBEAM	147	147	292	114	1.	1.	0.		+147BM								
+147BM									CBEAM	1093	1093	184	53	0.	1.	0.	
CBEAM	148	148	466	273	1.	1.	0.		CBEAM	1094	1094	53	189	0.	1.	0.	
CBEAM	149	149	273	464	1.	1.	0.		CBEAM	1095	1095	189	52	0.	1.	0.	
CBEAM	150	150	464	276	1.	1.	0.		CBEAM	1096	1096	52	193	0.	1.	0.	
CBEAM	151	151	276	279	1.	1.	0.		CBEAM	1097	1097	193	51	0.	1.	0.	
CBEAM	152	152	279	290	1.	1.	0.		CBEAM	1098	1098	51	22	0.	1.	0.	+109BM
CBEAM	153	153	290	293	1.	1.	0.		+109BM								
CBEAM	154	154	293	79	1.	1.	0.		CBEAM	1099	1099	22	21	0.	1.	0.	
+154BM									CBEAM	1100	1100	21	20	0.	1.	0.	
CBEAM	160	160	295	300	1.	1.	0.		CBEAM	1101	1101	20	19	0.	1.	0.	
CBEAM	161	161	300	300	1.	1.	0.		CBEAM	1102	1102	68	67	0.	1.	0.	
CBEAM	162	162	300	79	1.	1.	0.		CBEAM	1103	1103	67	185	0.	1.	0.	
CBEAM	163	163	79	114	1.	1.	0.		CBEAM	1104	1104	185	65	0.	1.	0.	
CBEAM	164	164	283	295	1.	1.	0.		CBEAM	1105	1105	65	190	0.	1.	0.	
CBEAM	165	165	295	294	1.	1.	0.		CBEAM	1106	1106	190	64	0.	1.	0.	
CBEAM	166	166	293	292	1.	1.	0.		CBEAM	1107	1107	64	63	0.	1.	0.	
CBEAM	167	167	282	291	1.	1.	0.		CBEAM	1108	1108	63	62	0.	1.	0.	
CBEAM	168	168	290	280	1.	1.	0.		CBEAM	1109	1109	62	61	0.	1.	0.	
CBEAM	169	169	279	271	1.	1.	0.		CBEAM	1110	1110	61	60	0.	1.	0.	
+169BM									CBEAM	1111	1111	60	19	0.	1.	0.	
CBEAM	170	170	271	278	1.	1.	0.		+170BM								
+170BM									CBEAM	1112	1112	245	244	0.	1.	0.	
CBEAM	171	171	281	277	1.	1.	0.		CBEAM	1113	1113	244	243	0.	1.	0.	
CBEAM	172	172	276	275	1.	1.	0.		CBEAM	1114	1114	243	242	0.	1.	0.	
CBEAM	173	173	464	465	1.	1.	0.		CBEAM	1115	1115	242	143	0.	1.	0.	
CBEAM	174	174	466	467	1.	1.	0.		CBEAM	1116	1116	81	80	0.	1.	0.	
CBEAM	175	175	271	272	1.	1.	0.		+175BM								
+175BM									CBEAM	1117	1117	80	186	0.	1.	0.	
CBEAM	176	176	273	241	1.	1.	0.		CBEAM	1119	1119	79	191	0.	1.	0.	
CBEAM	177	177	241	299	1.	1.	0.		CBEAM	1120	1120	191	77	0.	1.	0.	
CBEAM	178	178	299	272	1.	1.	0.		CBEAM	1121	1121	77	76	0.	1.	0.	
CBEAM	179	179	272	274	1.	1.	0.		CBEAM	1122	1122	76	75	0.	1.	0.	
CBEAM	180	180	274	233	1.	1.	0.		CBEAM	1123	1123	75	74	0.	1.	0.	
CBEAM	181	181	195	296	1.	1.	0.		CBEAM	1124	1124	74	73	0.	1.	0.	
+181BM																	

CBEAM	1147	1147	173	177	1.	0.	0.		CBEAM	2009	2009	253	508	1.	1.	0.	+BM2009
CBEAM	1148	1148	2	194	1.	0.	0.	+BM1150	CBEAM	2010	2010	508	258	1.	1.	0.	
CBEAM	1149	1149	194	9	1.	0.	0.		CBEAM	2011	2011	258	519	1.	1.	0.	
CBEAM	1150	1150	9	20	1.	0.	0.		CBEAM	2012	2012	519	263	1.	1.	0.	+BM2012
+BM1150	5								CBEAM	2013	2013	254	509	1.	1.	0.	+BM2013
CBEAM	1151	1151	1	8	1.	0.	0.		CBEAM	2014	2014	509	259	1.	1.	0.	
CBEAM	1152	1152	6	7	1.	0.	0.		CBEAM	2015	2015	259	520	1.	1.	0.	
CBEAM	1153	1153	176	6	1.	0.	0.		CBEAM	2016	2016	520	264	1.	1.	0.	+BM2016
CBEAM	1154	1154	5	176	1.	0.	0.		CBEAM	2017	2017	255	510	1.	1.	0.	+BM2017
CBEAM	1155	1155	175	5	1.	0.	0.		CBEAM	2018	2018	510	260	1.	1.	0.	
CBEAM	1156	1156	4	175	1.	0.	0.		CBEAM	2019	2019	260	521	1.	1.	0.	
CBEAM	1157	1157	174	4	1.	0.	0.		CBEAM	2020	2020	521	265	1.	1.	0.	+BM2020
CBEAM	1158	1158	3	174	1.	0.	0.		CBEAM	2021	2021	256	511	1.	1.	0.	+BM2021
CBEAM	1159	1159	173	3	1.	0.	0.		CBEAM	2022	2022	511	261	1.	1.	0.	+BM2022
CBEAM	1160	1160	2	173	1.	0.	0.		CBEAM	2023	2023	261	522	1.	1.	0.	+BM2023
CBEAM	1161	1161	1	2	1.	0.	0.		CBEAM	2024	2024	522	266	1.	1.	0.	+BM2024
CBEAM	1162	1162	16	18	1.	0.	0.		CBEAM	2031	2031	251	501	1.	1.	0.	+BM2031
CBEAM	1163	1163	180	16	1.	0.	0.		CBEAM	2032	2032	501	252	1.	1.	0.	
CBEAM	1164	1164	14	180	1.	0.	0.		CBEAM	2033	2033	252	502	1.	1.	0.	
CBEAM	1165	1165	179	14	1.	0.	0.		CBEAM	2034	2034	502	253	1.	1.	0.	
CBEAM	1166	1166	12	179	1.	0.	0.		CBEAM	2035	2035	253	503	1.	1.	0.	
CBEAM	1167	1167	178	12	1.	0.	0.		CBEAM	2036	2036	503	254	1.	1.	0.	
CBEAM	1168	1168	10	178	1.	0.	0.		CBEAM	2037	2037	254	504	1.	1.	0.	
CBEAM	1169	1169	177	10	1.	0.	0.		CBEAM	2038	2038	504	255	1.	1.	0.	
CBEAM	1170	1170	194	177	1.	0.	0.		CBEAM	2039	2039	255	505	1.	1.	0.	
CBEAM	1171	1171	8	194	1.	0.	0.		CBEAM	2040	2040	505	256	1.	1.	0.	+BM2040
CBEAM	1181	1181	81	95	1.	0.	0.		CBEAM	2041	2041	233	512	1.	1.	0.	
+BM1181	456								CBEAM	2042	2042	512	257	1.	1.	0.	
CBEAM	1182	1182	95	142	1.	0.	0.		CBEAM	2043	2043	257	513	1.	1.	0.	
CBEAM	1183	1183	142	101	1.	0.	0.		CBEAM	2044	2044	513	258	1.	1.	0.	
CBEAM	1184	1184	101	107	1.	0.	0.		CBEAM	2045	2045	258	514	1.	1.	0.	
CBEAM	1185	1185	107	113	1.	0.	0.		CBEAM	2046	2046	514	259	1.	1.	0.	
CBEAM	1186	1186	93	141	1.	0.	0.		CBEAM	2047	2047	259	515	1.	1.	0.	
CBEAM	1187	1187	141	100	1.	0.	0.		CBEAM	2048	2048	515	260	1.	1.	0.	
CBEAM	1188	1188	100	106	1.	0.	0.		CBEAM	2049	2049	260	516	1.	1.	0.	+BM2050
CBEAM	1189	1189	106	112	1.	0.	0.		CBEAM	2050	2050	516	261	1.	1.	0.	
CBEAM	1190	1190	186	124	1.	0.	0.		CBEAM	2051	2051	262	523	1.	1.	0.	+BM2051
+BM1190	456								CBEAM	2052	2052	523	263	1.	1.	0.	
CBEAM	1191	1191	124	140	1.	0.	0.		CBEAM	2053	2053	263	524	1.	1.	0.	
CBEAM	1192	1192	140	127	1.	0.	0.		CBEAM	2054	2054	524	264	1.	1.	0.	
CBEAM	1193	1193	127	130	1.	0.	0.		CBEAM	2055	2055	264	525	1.	1.	0.	
CBEAM	1194	1194	130	133	1.	0.	0.		CBEAM	2056	2056	525	265	1.	1.	0.	
CBEAM	1195	1195	92	139	1.	0.	0.		CBEAM	2057	2057	265	526	1.	1.	0.	+BM2058
CBEAM	1196	1196	139	99	1.	0.	0.		CBEAM	2058	2058	526	266	1.	1.	0.	
CBEAM	1197	1197	99	105	1.	0.	0.		CBEAM	3001	3001	19	3007	0.	1.	0.	
CBEAM	1198	1198	105	111	1.	0.	0.		CBEAM	3002	3002	3001	3008	0.	1.	0.	
CBEAM	1199	1199	191	123	1.	0.	0.		CBEAM	3003	3003	3002	3003	1.	0.	0.	
+BM1199	456								CBEAM	3004	3004	3003	3004	1.	0.	0.	
CBEAM	1200	1200	123	138	1.	0.	0.		CBEAM	3005	3005	3004	3005	1.	0.	0.	
CBEAM	1201	1201	138	126	1.	0.	0.		CBEAM	3006	3006	3005	3006	1.	0.	0.	
CBEAM	1202	1202	126	129	1.	0.	0.		CBEAM	3007	3007	3006	3007	1.	0.	0.	
CBEAM	1203	1203	129	132	1.	0.	0.		CBEAM	3008	3008	3007	3008	1.	0.	0.	
CBEAM	1204	1204	91	137	1.	0.	0.		CBEAM	3009	3009	3008	3009	1.	0.	0.	+3009
CBEAM	1205	1205	137	98	1.	0.	0.		CBEAM	3131	3131	21	3076	0.	0.	1.	+3131
CBEAM	1206	1206	98	104	1.	0.	0.		CBEAM	3132	3132	3076	61	0.	0.	1.	+3132
CBEAM	1207	1207	104	110	1.	0.	0.		CBEAM	3133	3133	3076	3079	0.	1.	0.	+3133
CBEAM	1208	1208	122	136	1.	0.	0.		CBEAM	3134	3134	3079	3083	0.	1.	0.	
CBEAM	1209	1209	136	125	1.	0.	0.		CBEAM	3135	3135	3082	3077	0.	1.	0.	
CBEAM	1210	1210	125	128	1.	0.	0.		CBEAM	3136	3136	3077	3078	0.	0.	1.	+3136
CBEAM	1211	1211	128	131	1.	0.	0.		CBEAM	3137	3137	3084	3078	0.	1.	0.	+3137
CBEAM	1212	1212	76	90	1.	0.	0.		CBEAM	3138	3138	3082	3083	0.	0.	1.	+3138
+BM1212	456								CBEAM	3139	3139	3138	3083	0.	0.	1.	+3139
CBEAM	1213	1213	90	135	1.	0.	0.		CBEAM	3140	3140	3080	3081	0.	0.	1.	
CBEAM	1214	1214	135	97	1.	0.	0.		CBEAM	3141	3141	3081	3082	0.	0.	1.	
CBEAM	1215	1215	97	103	1.	0.	0.		CBEAM	3142	3142	3082	3084	0.	0.	1.	
CBEAM	1216	1216	103	109	1.	0.	0.		CBEAM	3143	3143	3084	3085	0.	0.	1.	
CBEAM	1217	1217	89	134	1.	0.	0.		CBEAM	3144	3144	3080	3081	0.	0.	1.	
CBEAM	1218	1218	134	96	1.	0.	0.		CBEAM	3145	3145	3081	3082	0.	0.	1.	
CBEAM	1219	1219	96	102	1.	0.	0.		CBEAM	3146	3146	3082	3084	0.	0.	1.	
CBEAM	1220	1220	102	108	1.	0.	0.		CBEAM	3147	3147	3084	3085	0.	0.	1.	
CBEAM	1221	1221	141	142	1.	0.	0.		CBEAM	3148	3148	3085	3086	0.	0.	1.	
CBEAM	1222	1222	140	141	1.	0.	0.		CBEAM	3149	3149	3086	3087	0.	0.	1.	
CBEAM	1223	1223	139	140	1.	0.	0.		CBEAM	3150	3150	3087	3088	0.	0.	1.	
CBEAM	1224	1224	138	139	1.	0.	0.		CBEAM	3151	3151	3088	3089	0.	0.	1.	
CBEAM	1225	1225	137	138	1.	0.	0.		CBEAM	3152	3152	3089	3090	0.	0.	1.	
CBEAM	1226	1226	136	136	1.	0.	0.		CBEAM	3153	3153	3090	3091	0.	0.	1.	
CBEAM	1227	1227	100	101	1.	0.	0.		CBEAM	3154	3154	3091	3092	0.	0.	1.	
CBEAM	1228	1228	127	100	1.	0.	0.		CBEAM	3155	3155	3092	3093	0.	0.	1.	
CBEAM	1229	1229	99	127	1.	0.	0.		CBEAM	3156	3156	3093	3094	0.	0.	1.	
CBEAM	1230	1230	126	105	1.	0.	0.		CBEAM	3157	3157	3094	3095	0.	0.	1.	
CBEAM	1231	1231	105	130	1.	0.	0.		CBEAM	3158	3158	3095	3096	0.	0.	1.	
CBEAM	1232	1232	105	129	1.	0.	0.		CBEAM	3159	3159	3096	3097	0.	0.	1.	
CBEAM	1233	1233	105	129	1.	0.	0.		CBEAM	3160	3160	3097	3098	0.	0.	1.	
CBEAM	1234	1234	105	129	1.	0.	0.		CBEAM	3161	3161	3098	3099	0.	0.	1.	
CBEAM	1235	1235	105	129	1.	0.											



CONN1	410	281	0	796.72		CONN1	3045	3088	200.	200.	+3045
CONN1	411	153	0		+411	CONN1	+3045A	200.	236476.8	236476.	+3045A
+411A				119126.	+411A	CONN1	3176	1947.			+3176
CONN1	412	154	0		+412	CONN1	+3176	3076	0		
+412					+412A	CONN1	3177	3079	0	25.4	+3178
+412A				498740.	+413	CONN1	3178	3080	0	56.46	+3179
CONN1	413	155	0		+413A	CONN1	3179	3081	0		
+413					+413A	CONN1	+3179	-4.88			
+413A				233410.	+414	CONN1	3180	3082	0	7.47	
CONN1	414	156	0		+414A	CONN1	3181	3083	0	87.0	
+414					+414A	CONN1	3182	3085	0	35.77	+3182
+414A				865169.	+415	CONN1	+3182	35.15			
CONN1	415	42	0		+415A	CONN1	3427	3204	0		+3427
+415					+416	CONN1	3428	3206	0	125.83	
+415A				1051483.	+416A	CONN1	3429	3207	0	208.0	
CONN1	416	71	0		+416A	CONN1	+3429	208.0			+3429
+416					+417	CONN1	3430	3210	0	.01	+3429A
+416A				1042917.	+417A	CONN1	+40430	.01			+40430
CONN1	417	286	0		+418	CONN1	3431	3211	0	229.3	
+417					+418A	CONN1	+40431	229.3			+40431
+417A				556929.	+419	CONN1	+40431A	561149.			+40431A
CONN1	418	284	0		+420	CONN1	3432	3212	0	231.3	
+418					+420	CONN1	3433	3213	0	2.0	
+418A				756147.	+421	CONN1	+40433	2.0			+40433
CONN1	430	195	0		+422	CONN2	3501	3500	345.	0. 0. 0.	+000001
+430	-82.94				+422	CONN2	+000001	3500	3013.92	447868.5	+000002
CONN1	431	296	0	3803477.	+423	CONN2	3504	3501	138.	0. 0. 0.	+000003
+431					+423	CONN2	+000002	3501	6769.7	62828.60	+000004
CONN1	432	296	0		+424	CONN2	+000003	3501	16.0875		
+432	2073.44				+425	CONN1	3432	3212			
CONN1	433	42	0	12204.0	+426	CONN1	3433	3213			
+433					+427	CONN1	+40434	3213			
CONN1	434	437	0		+428	CONN1	3434	3214			
+434					+429	CONN1	+40434A	3214			
+434A					+430	CONN1	3435	3215			
CONN1	435	281	0	19.7E6	+431	CONN1	+40435	3215			
+435					+432	CONN1	+40435A	3215			
+435A					+433	CONN1	3436	3216			
CONN1	436	410	0		+434	CONN1	+40436	3216			
+436					+435	CONN1	3437	3217			
+436A					+436	CONN1	+40436A	3217			
CONN1	437	410	0		+437	CONN1	3438	3218			
+437					+438	CONN1	+40437A	3218			
+437A					+439	CONN1	3439	3219			
CONN1	438	410	0	1990.5	+440	CONN1	+40439	3219			
+438					+441	CONN1	3440	3220			
+439	4.65				+442	CONN1	+40440	3220			
CONN1	440	252	0		+443	CONN1	3441	3221			
+440	5.123				+444	CONN1	+40441	3221			
CONN1	441	253	0		+445	CONN1	3442	3222			
+441	4.812				+446	CONN1	+40442	3222			
CONN1	442	254	0		+447	CONN1	3443	3223			
+442	3.069				+448	CONN1	+40443	3223			
CONN1	443	255	0		+449	CONN1	3444	3224			
+443	1.73				+450	CONN1	+40444	3224			
CONN1	444	256	0		+451	CONN1	3445	3225			
+444	2.547				+452	CONN1	+40445	3225			
CONN1	445	233	0		+453	CONN1	3446	3226			
+445	17.674				+454	CONN1	+40446	3226			
CONN1	446	251	0		+455	CONN1	3447	3227			
+446					+456	CONN1	+40447	3227			
CONN1	447	252	0		+457	CONN1	+40448	3227			
+447					+458	CONN1	+40449	3228			
+448					+459	CONN1	+40450	3228			
CONN1	449	254	0		+460	CONN1	+40451	3229			
+449					+461	CONN1	+40452	3229			
CONN1	450	255	0		+462	CONN1	+40453	3230			
+450					+463	CONN1	+40454	3230			
CONN1	451	256	0		+464	CONN1	+40455	3231			
+451					+465	CONN1	+40456	3231			
CONN1	452	233	0		+466	CONN1	+40457	3232			
+452	176.302				+467	CONN1	+40458	3232			
CONN1	453	257	0		+468	CONN1	+40459	3233			
+453	31.053				+469	CONN1	+40460	3233			
CONN1	454	258	0		+470	CONN1	+40461	3234			
+454					+471	CONN1	+40462	3234			
CONN1	455	259	0		+472	CONN1	+40463	3235			
+455	11.742				+473	CONN1	+40464	3235			
CONN1	456	260	0		+474	CONN1	+40465	3236			
+456	7.391				+475	CONN1	+40466	3236			
CONN1	457	261	0		+476	CONN1	+40467	3237			
+457	2.877				+477	CONN1	+40468	3237			
CONN1	458	262	0		+478	CONN1	+40469	3238			
+458	3.675				+479	CONN1	+40470	3238			
CONN1	459	263	0		+480	CONN1	+40471	3239			
+459	3.064				+481	CONN1	+40472	3239			
CONN1	460	264	0		+482	CONN1	+40473	3240			
+460	2.838				+483	CONN1	+40474	3240			
CONN1	461	265	0		+484	CONN1	+40475	3241			
+461	2.73				+485	CONN1	+40476	3241			
CONN1	462	266	0		+486	CONN1	+40477	3242			
+462	.976				+487	CONN1	+40478	3242			
CONN1	501	407	0	18.24	+488	CONN1	+40479	3243			
CONN1	502	409	0	24.64	+489	CONN1	+40480	3243			
CONN1	503	367	0	23.43	+490	CONN1	+40481	3244			
CONN1	504	408	0	30.93	+491	CONN1	+40482	3244			
CONN1	505	368	0	4.55	+492	CONN1	+40483	3245			
CONN1	506	359	0	15.9	+493	CONN1	+40484	3245			
CONN1	507	384	0	15.24	+494	CONN1	+40485	3246			
CONN1	508	389	0	.75	+495	CONN1	+40486	3246			
CONN1	509	369	0	3.81	+496	CONN1	+40487	3247			
CONN1	510	360	0	6.67	+497	CONN1	+40488	3247			
CONN1	511	385	0	5.77	+498	CONN1	+40489	3248			
CONN1	512	390	0	1.11	+499	CONN1	+40490	3248			
CONN1	513	370	0	2.55	+500	CONN1	+40491	3249			
CONN1	514	361	0	3.55	+501	CONN1	+40492	3249			
CONN1	515	386	0	3.1	+502	CONN1	+40493	3250			
CONN1	516	391	0	.93	+503	CONN1	+40494	3250			
CONN1	517	371	0	1.12	+504	CONN1	+40495	3251			
CONN1	518	362	0	2.9	+505	CONN1	+40496	3251			
CONN1	519	387	0	2.4	+506	CONN1	+40497	3252			
CONN1	520	392	0	-.59	+507	CONN1	+40498	3252			
CONN1	521	393	0	.37	+508	CONN1	+40499	3253			
CONN1	522	373	0	1.94	+509	CONN1	+40500	3253			
CONN1	523	364	0	.48	+510	CONN1	+40501	3254			
CONN1	524	381	0	2.66	+511	CONN1	+40502	3254			
CONN1	525	383	0	.89	+512	CONN1	+40503	3255			
CONN1	526	281			+513	CONN1	+40504	3255			
+526					+514	CONN1	+40505	3256			
CONN1	3020	3004		822933.	+515	CONN1	+40506	3256			
+3020	23.24				+516	CONN1	+40507	3257			
CONN1	3021	3006			+517	CONN1	+40508	3257			
+3021	21.35				+518	CONN1	+40509	3258			
CONN1	3022	3009			+519	CONN1	+40510	3258			
+3022	14.41				+520	CONN1	+40511	3259			
CONN1	3023	3002			+521	CONN1	+40512	3259			
+3023	16.5				+522	CONN1	+40513	3260			
CONN1					+523	CONN1	+40514	3260			
					+524	CONN1	+40515	3261			
					+525	CONN1	+40516	3261			
					+526	CONN1	+40517	3262			
					+527	CONN1	+40518	3262			
					+528	CONN1	+40519	3263			</td

CQUAD4	663	663	1107	1113	1112	1106	+1709	2521	2515		99.5	
CQUAD4	664	664	1141	1100	1127	1140	CQUAD8	1710	710	2260	2265	2266
CQUAD4	665	665	1100	1106	1130	1127	+1710	2522	2516	2266	2261	2521
CQUAD4	666	666	1106	1112	1133	1130	CSEAR	71	71	1034	1040	1037
CQUAD4	667	667	1140	1127	1099	1139	CSEAR	72	72	1040	1048	1045
CQUAD4	668	668	1127	1130	1105	1099	CSEAR	73	73	1048	1057	1054
CQUAD4	669	669	1130	1133	1111	1105	CSEAR	74	74	1057	1069	1066
CQUAD4	670	670	1139	1099	1126	1138	CSEAR	75	75	1069	1082	1121
CQUAD4	671	671	1099	1105	1129	1126	CSEAR	76	76	1094	1079	1114
CQUAD4	672	672	1105	1111	1132	1129	CSEAR	77	71	2034	2040	2037
CQUAD4	673	673	1138	1126	1098	1137	CSEAR	78	72	2040	2048	2045
CQUAD4	674	674	1126	1129	1104	1098	CSEAR	79	73	2048	2057	2054
CQUAD4	675	675	1129	1132	1110	1104	CSEAR	80	74	2057	2069	2066
CQUAD4	676	676	1137	1098	1125	1136	CSEAR	81	75	2069	2082	2121
CQUAD4	677	677	1098	1104	1128	1125	CSEAR	82	76	2094	2079	2114
CQUAD4	678	678	1104	1110	1131	1128	CSEAR	201	201	1465	1464	1467
CQUAD4	679	679	1136	1125	1097	1135	CSEAR	202	202	1275	1276	1464
CQUAD4	680	680	1125	1128	1103	1097	CSEAR	203	203	1280	1290	1275
CQUAD4	681	681	1128	1131	1109	1103	CSEAR	204	204	1114	1079	1293
CQUAD4	682	682	1135	1097	1096	1134	CSEAR	205	201	2465	2464	2467
CQUAD4	683	683	1097	1103	1102	1096	CSEAR	206	202	2275	2276	2464
CQUAD4	684	684	1103	1109	1108	1102	CSEAR	207	203	2280	2290	2275
CQUAD4	1601	601	2033	2039	2038	2032	CSEAR	208	204	2114	2079	2292
CQUAD4	1602	602	2039	2047	2046	2038	CSEAR	642	642	1075	1088	1074
CQUAD4	1603	603	2047	2056	2055	2046	CSEAR	646	646	1074	1087	1073
CQUAD4	1604	604	2056	2068	2067	2055	CSEAR	650	650	1073	1086	1085
CQUAD4	1605	605	2068	2091	2080	2067	CSEAR	651	651	1007	1018	1016
CQUAD4	1607	607	2038	2182	2181	2030	CSEAR	652	652	1006	1016	1176
CQUAD4	1608	608	2038	2046	2183	2182	CSEAR	653	653	1176	1180	1014
CQUAD4	1609	609	2046	2055	2184	2183	CSEAR	654	654	1005	1014	1175
CQUAD4	1610	610	2055	2067	2185	2184	CSEAR	655	655	1175	1179	1012
CQUAD4	1611	611	2067	2080	2186	2185	CSEAR	656	656	1004	1012	1174
CQUAD4	1613	613	2182	2183	2044	2029	CSEAR	657	657	1174	1178	1010
CQUAD4	1614	614	2183	2184	2053	2044	CSEAR	658	658	1003	1010	1173
CQUAD4	1615	615	2184	2185	2065	2053	CSEAR	659	659	1173	1177	1194
CQUAD4	1616	616	2185	2186	2078	2065	CSEAR	660	660	1002	1194	1001
CQUAD4	1618	618	2027	2044	2188	2187	CSEAR	1642	642	2075	2088	2074
CQUAD4	1619	619	2044	2053	2189	2188	CSEAR	1646	646	2074	2087	2086
CQUAD4	1620	620	2053	2065	2190	2189	CSEAR	1650	650	2073	2086	2072
CQUAD4	1621	621	2065	2078	2191	2190	CSEAR	1651	651	2007	2018	2006
CQUAD4	1623	623	2180	2189	2052	2026	CSEAR	1652	652	2006	2016	2176
CQUAD4	1624	624	2189	2190	2064	2052	CSEAR	1653	653	2176	2180	2014
CQUAD4	1625	625	2190	2191	2077	2064	CSEAR	1654	654	2005	2014	2175
CQUAD4	1627	627	2025	2052	2193	2192	CSEAR	1655	655	2175	2179	2012
CQUAD4	1628	628	2052	2064	2193	2192	CSEAR	1656	656	2004	2012	2174
CQUAD4	1632	632	2192	2193	2051	2024	CSEAR	1657	657	2174	2178	2010
CQUAD4	1633	633	2193	2063	2062	2051	CSEAR	1658	658	2003	2010	2173
CQUAD4	1634	634	2063	2245	2244	2062	CSEAR	1659	659	2173	2177	2194
CQUAD4	1635	635	2245	2076	2075	2244	CSEAR	1660	660	2002	2194	2008
CQUAD4	1639	639	2062	2061	2021	2022	CSEAR	3150	3158	3091	3092	3094
CQUAD4	1640	640	2062	2244	2243	2061	CSEAR	3159	3158	3095	3096	3097
CQUAD4	1641	641	2244	2075	2074	2243	CTRIA3	606	606	1032	1038	1030
CQUAD4	1643	643	2021	2061	2060	2020	CTRIA3	612	612	1181	1182	1029
CQUAD4	1644	644	2061	2243	2242	2060	CTRIA3	617	617	1029	1044	1027
CQUAD4	1645	645	2243	2074	2073	2242	CTRIA3	622	622	1187	1188	1026
CQUAD4	1648	648	2060	2242	2143	2019	CTRIA3	626	626	1026	1052	1025
CQUAD4	1649	649	2242	2073	2072	2143	CTRIA3	629	629	1064	1245	1063
CQUAD4	1661	661	2142	2101	2100	2141	CTRIA3	630	630	1064	1077	1245
CQUAD4	1662	662	2101	2107	2106	2100	CTRIA3	631	631	1077	1076	1245
CQUAD4	1663	663	2107	2113	2112	2106	CTRIA3	636	636	1051	1023	1024
CQUAD4	1664	664	2141	2100	2127	2140	CTRIA3	637	637	1051	1022	1023
CQUAD4	1665	665	2100	2106	2130	2127	CTRIA3	638	638	1062	1022	1051
CQUAD4	1666	666	2112	2133	2130	2130	CTRIA3	647	647	1019	1020	1060
CQUAD4	1667	667	2140	2127	2099	2139	CTRIA3	1606	606	2032	2038	2030
CQUAD4	1668	668	2127	2130	2105	2099	CTRIA3	1612	612	2181	2182	2029
CQUAD4	1669	669	2130	2133	2111	2105	CTRIA3	1617	617	2029	2044	2027
CQUAD4	1670	670	2139	2099	2126	2138	CTRIA3	1622	622	2187	2188	2026
CQUAD4	1671	671	2099	2105	2129	2126	CTRIA3	1626	626	2026	2052	2025
CQUAD4	1672	672	2105	2111	2132	2129	CTRIA3	1629	629	2064	2245	2063
CQUAD4	1673	673	2138	2126	2098	2137	CTRIA3	1630	630	2064	2077	2245
CQUAD4	1674	674	2126	2129	2104	2098	CTRIA3	1631	631	2077	2076	2245
CQUAD4	1675	675	2129	2132	2110	2104	CTRIA3	1636	636	2051	2053	2024
CQUAD4	1676	676	2137	2098	2125	2136	CTRIA3	1637	637	2051	2022	2023
CQUAD4	1677	677	2098	2104	2128	2125	CTRIA3	1638	638	2062	2022	2051
CQUAD4	1678	678	2104	2110	2131	2128	CTRIA3	1647	647	2019	2020	2060
CQUAD4	1679	679	2136	2125	2097	2135	CTRIA6	706	706	1262	1257	1233
CQUAD4	1680	680	2125	2128	2103	2097	+706	99.5		1518	1512	1517
CQUAD4	1681	681	2128	2131	2109	2103	+706	99.5		+706		
CQUAD4	1682	682	2135	2097	2096	2134	+706	99.5		+706		
CQUAD4	1683	683	2097	2103	2102	2096	+706	99.5		+706		
CQUAD4	1684	684	2103	2109	2108	2102	+706	99.5		+706		
CQUAD8	701	701	1257	1252	1251	1233	+701	1507	1501	+701	1512	+706
CQUAD8	702	702	1252	1257	1258	1253	+702	1508	1514	+703	1509	+706
CQUAD8	703	703	1253	1258	1259	1254	+703	99.5		+703	1503	+706
CQUAD8	704	704	1254	1259	1260	1255	+704	1509	1515	+704	1510	+706
CQUAD8	705	705	1255	1260	1261	1256	+705	1510	1516	+705	1511	+706
CQUAD8	707	707	1257	1262	1263	1258	+707	1518	1523	+707	1513	+706
CQUAD8	708	708	1258	1263	1264	1259	+708	1519	1524	+708	1514	+706
CQUAD8	709	709	1259	1264	1265	1260	+709	1520	1525	+709	1515	+706
CQUAD8	710	710	1260	1265	1266	1261	+710	1521	1526	+710	1515	+706
CQUAD8	711	711	1266	1265	1266	1261	+711	1516	1526	+711	1512	+706
CQUAD8	701	701	2257	2252	2251	2233	+701	2507	2501	+701	2512	+706
CQUAD8	702	702	2252	2257	2258	2253	+702	2507	2513	+702	2505	+706
CQUAD8	703	703	2253	2258	2259	2254	+703	2508	2514	+703	2505	+706
CQUAD8	704	704	2254	2259	2260	2255	+704	2509	2515	+704	2504	+706
CQUAD8	705	705	2255	2260	2261	2256	+705	2510	2516	+705	2511	+706
CQUAD8	706	706	2261	2262	2263	2258	+706					

*9028	363	1	0.334950E+05		*9133	371	1	-467290E+02	+9134
DMIG	*VTAIL	364	1	-178665E+00	*9029	*9134	372	0.428324E+01	+9135
*9029	357	1	0.286879E+01	*9030	*9135	373	-914807E+00	+9136	
*9030	358	1	0.822153E+02	*9031	*9136	375	0.925573E+06		
*9031	359	1	-179730E+02	*9032	DMIG	*VTAIL	376	1	+9137
*9032	360	1	0.822153E+02	*9033	*9137	357	0.922286E+03	+9138	
*9033	361	1	-308830E+03	*9034	*9138	358	0.349061E+04	+9139	
*9034	362	1	0.163581E+04	*9035	*9139	359	-272521E+05	+9140	
*9035	363	1	-334300E+04	*9036	*9140	360	0.153243E+04	+9141	
*9036	364	1	0.133364E+05		*9141	361	0.667605E+03	+9142	
DMIG	*VTAIL	367	1	0.156429E+04	*9037	*9142	362	-740884E+01	+9143
*9037	357	1	-126722E+05	*9038	*9143	363	-243058E+02	+9144	
*9038	358	1	-249630E+02	*9039	*9144	364	0.583973E+00	+9145	
*9039	359	1	0.252357E+03	*9040	*9145	367	0.194037E+04	+9146	
*9040	360	1	0.220342E+02	*9041	*9146	368	0.129929E+04	+9147	
*9041	361	1	-348369E+01	*9042	*9147	369	0.235053E+01	+9148	
*9042	362	1	0.213553E-02	*9043	*9148	370	0.756407E+03	+9149	
*9043	363	1	0.287588E+00	*9044	*9149	371	0.771059E+02	+9150	
*9044	364	1	0.573159E+05	*9045	*9150	372	-600606E+00	+9151	
*9045	367	1			*9151	373	0.197780E+01	+9152	
DMIG	*VTAIL	368	1	0.150006E+03	*9046	*9152	375	-311505E+05	+9153
*9046	357	1	-349447E+04	*9047	*9153	376	0.109246E+06		
*9047	358	1	-186666E+05	*9048	DMIG	*VTAIL	377	1	+9154
*9048	359	1	-597411E+03	*9049	*9154	357	0.317443E+03	+9155	
*9049	360	1	0.413201E+03	*9050	*9155	358	0.219380E+04	+9156	
*9050	361	1	-489800E+02	*9051	*9156	359	0.208271E+04	+9157	
*9051	362	1	-271009E+00	*9052	*9157	360	-279276E+05	+9158	
*9052	363	1	-202789E+01	*9053	*9158	361	0.110103E+00	+9159	
*9053	364	1	-502776E+04	*9054	*9159	362	0.550257E+03	+9160	
*9054	367	1	0.246725E+05	*9055	*9160	363	0.811533E+02	+9161	
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DMIG	*VTAIL	369	1	0.292477E+03	*9056	*9162	367	0.716540E+03	+9163
*9056	357	1	0.106678E+04	*9057	*9163	368	0.171546E+04	+9164	
*9057	358	1	-372974E+04	*9058	*9164	369	0.884905E+03	+9165	
*9058	359	1	-163066E+05	*9059	*9165	370	0.158823E+00	+9166	
*9059	360	1	-720338E+03	*9060	*9166	371	0.561757E+03	+9167	
*9060	361	1	0.400484E+03	*9061	*9167	372	0.690199E+02	+9168	
*9061	362	1	0.516836E+00	*9062	*9168	373	0.714289E+01	+9169	
*9062	363	1	-141972E+02	*9063	*9169	375	0.363833E+04	+9170	
*9063	364	1	0.245134E+03	*9064	*9170	376	-187741E+05	+9171	
*9064	367	1	-625047E+04	*9065	*9171	377	0.775901E+05	+9172	
*9065	368	1	0.208907E+05	*9066	DMIG	*VTAIL	378	1	+9173
*9066	369	1			*9172	357	-110646E+02	+9173	
DMIG	*VTAIL	370	1	0.109520E+02	*9067	*9173	358	0.133390E+03	+9174
*9067	357	1	-429165E+02	*9068	*9174	359	0.711357E+03	+9175	
*9068	358	1	0.371998E+03	*9069	*9175	360	0.202839E+04	+9176	
*9069	359	1	-238343E+04	*9070	*9176	361	-261682E+05	+9177	
*9070	360	1	-147446E+05	*9071	*9177	362	0.139574E+05	+9178	
*9071	361	1	0.690143E+03	*9072	*9178	363	0.872899E+03	+9179	
*9072	362	1	0.723676E+03	*9073	*9179	364	0.171732E+03	+9180	
*9073	363	1	0.244021E+02	*9074	*9180	367	0.741269E+02	+9181	
*9074	364	1	-574195E+02	*9075	*9181	368	0.487425E+03	+9182	
*9075	367	1	0.416297E+03	*9076	*9182	369	0.121023E+04	+9183	
*9076	368	1	-416040E+04	*9077	*9183	370	0.188910E+04	+9184	
*9077	369	1	0.182966E+05	*9078	*9184	371	0.440030E+04	+9185	
*9078	370	1			*9185	372	0.265625E+03	+9186	
DMIG	*VTAIL	371	1	-319898E+00	*9079	*9186	373	0.127903E+03	+9187
*9079	357	1	-105520E+02	*9080	*9187	375	-234087E+03	+9188	
*9080	358	1	0.537074E+02	*9081	*9188	376	0.178520E+04	+9189	
*9081	359	1	0.115046E+03	*9082	*9189	377	-113866E+05	+9190	
*9082	360	1	-455381E+03	*9083	*9190	378	0.701957E+05		
*9083	361	1	-131301E+05	*9084	DMIG	*VTAIL	379	1	+9191
*9084	362	1	0.208463E+01	*9085	*9191	357	0.555097E+00	+9192	
*9085	363	1	-271095E+03	*9086	*9192	358	-383492E+02	+9193	
*9086	364	1	0.123231E+02	*9087	*9193	359	0.749947E+02	+9194	
*9087	367	1	-234544E+03	*9088	*9194	360	0.542347E+03	+9195	
*9088	368	1	0.871696E+03	*9089	*9195	361	0.295319E+04	+9196	
*9089	369	1	-744486E+04	*9090	*9196	362	-156110E+05	+9197	
*9090	370	1	0.300624E+05	*9091	*9197	363	0.237945E+03	+9198	
*9091	371	1			*9198	364	0.100000E+04	+9199	
DMIG	*VTAIL	372	1	0.463602E+00	*9092	*9199	367	-853152E+01	+9200
*9092	357	1	-677371E+01	*9093	*9200	368	0.224612E+02	+9201	
*9093	358	1	-130408E+02	*9094	*9201	369	0.450535E+03	+9202	
*9094	359	1	0.577641E+02	*9095	*9202	370	0.123586E+04	+9203	
*9095	360	1	0.669330E+02	*9096	*9203	371	0.192022E+04	+9204	
*9096	361	1	-915742E+03	*9097	*9204	372	0.747017E+03	+9205	
*9097	362	1	-544593E+04	*9098	*9205	373	0.679657E+03	+9206	
*9098	363	1	0.116824E+01	*9099	*9206	375	0.693183E+02	+9207	
*9099	364	1	-794538E+01	*9100	*9207	376	-525747E+03	+9208	
*9100	367	1	0.789193E+02	*9101	*9208	377	0.193872E+04	+9209	
*9101	368	1	-316023E+03	*9102	*9209	378	0.143803E+05	+9210	
*9102	369	1	0.187626E+04	*9103	*9210	379	0.259716E+05		
*9103	370	1	-192798E+05	*9104	DMIG	*VTAIL	380	1	+9211
*9104	371	1	0.276330E+05	*9105	*9211	357	-681648E-01	+9212	
*9105	372	1			*9212	358	0.121017E+01	+9213	
DMIG	*VTAIL	373	1	0.484195E-02	*9106	*9213	359	-388187E+01	+9214
*9106	357	1	0.440965E+00	*9107	*9214	360	0.424117E+02	+9215	
*9107	358	1	-691597E+00	*9108	*9215	361	0.491571E+03	+9216	
*9108	359	1	-875753E+00	*9109	*9216	362	0.156462E+04	+9217	
*9109	360	1	0.363362E+02	*9110	*9217	363	-188062E+05	+9218	
*9110	361	1	0.411035E+01	*9111	*9218	364	-222663E+04	+9219	
*9111	362	1	-163347E+04	*9112	*9219	367	0.511802E+00	+9220	
*9112	363	1	-258823E+04	*9113	*9220	368	-337087E+01	+9221	
*9113	364	1	0.345739E+00	*9114	*9221	369	0.222733E+02	+9222	
*9114	367	1	-422117E+01	*9115	*9222	370	0.254233E+03	+9223	
*9115	368	1	0.101714E+02	*9116	*9223	371	0.570111E+03	+9224	
*9116	369	1	-633944E+02	*9117	*9224	372	0.211878E+04	+9225	
*9117	370	1	0.270474E+04	*9118	*9225	373	0.303574E+03	+9226	
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*9119	372	1	0.703131E+04	*9120	*9227	376	0.872011E+02	+9228	
*9120	373	1			*9228	377	-226099E+03	+9229	
DMIG	*VTAIL	375	1	-230046E+04	*9121	*9229	378	0.236420E+04	+9230
*9121	357	1	-497159E+05	*9122	*9230	379	-100636E+05	+9231	
*9122	358	1	0.157355E+04	*9123	*9231	380	0.832375E+05		
*9123	359	1	0.126726E+04	*9124	DMIG	*VTAIL	381	1	+9232
*9124	360	1	0.195618E+03	*9125	*9232	357	-215496E-02	+9233	
*9125	361	1	-247898E+02	*9126	*9233	358	-127980E+00	+9234	
*9126	362	1	0.655440E+01	*9127	*9234	359	-670087E+00	+9235	
*9127	363	1	-784751E+00	*9128	*9235	360	-448327E+01	+9236	
*9128	364	1	0.378804E+03	*9129	*9236	361	-502647E+02	+9237	
*9129	367	1	-142639E+04	*9130	*9237	362	0.467098E+02	+9238	
*9130	368	1	-123230E+04	*9131	*9238	363	0.163977E+04	+9239	
*9131	369	1	0.123205E+04	*9132	*9239	364	-479445E+04	+9240	
*9132	370	1	0.216183E+03	*9133	*9240	367	-110671E+00	+9241	

*9241	368	1	0.669332E+00	*9242	*9351	385	1	0.349451E+05	*9352	
*9242	369	1	-5.71058E+01	*9243	DMIG	*VTAIL	386	1	0.106815E+00	
*9243	370	1	-1.82164E+02	*9244	*9352	357	1	-2.24760E+02	*9353	
*9244	371	1	-4.60481E+02	*9245	*9353	358	1	0.196095E+03	*9355	
*9245	372	1	0.878765E+02	*9246	*9354	359	1	-35.9483E+03	*9356	
*9246	373	1	0.449404E+03	*9247	*9355	360	1	0.606719E+04	*9357	
*9247	375	1	0.842499E+01	*9248	*9356	361	1	0.281741E+03	*9358	
*9248	376	1	-3.20128E+02	*9249	*9357	362	1	0.117268E+03	*9359	
*9249	377	1	0.773381E+02	*9250	*9358	363	1	0.195964E+02	*9360	
*9250	378	1	-6.17478E+03	*9251	*9359	364	1	-4.526268E+00	*9361	
*9251	379	1	0.379035E+04	*9252	*9360	367	1	0.496996E+02	*9362	
*9252	380	1	-1.13558E+05	*9253	*9361	368	1	0.352965E+03	*9363	
*9253	381	1	0.131793E+05	*9254	*9362	369	1	-14.2282E+03	*9364	
DMIG	*VTAIL	382	1	*9254	*9363	370	1	0.321919E+03	*9365	
*9254	357	1	-2.11797E-02	*9255	*9364	371	1	0.854219E+02	*9366	
*9255	358	1	0.196775E-01	*9256	*9365	372	1	0.160192E+02	*9367	
*9256	359	1	-1.548098E+00	*9257	*9366	373	1	0.321817E+03	*9368	
*9257	360	1	0.8352198E+00	*9258	*9367	375	1	-31.8383E+02	*9369	
*9258	361	1	0.4619816E+01	*9259	*9368	376	1	-4.20586E+03	*9370	
*9259	362	1	0.180099E+02	*9260	*9369	377	1	-31.4870E+05	*9371	
*9260	363	1	0.393001E+02	*9261	*9370	378	1	-6.89958E+03	*9372	
*9261	364	1	0.813303E+03	*9262	*9371	379	1	0.423422E+01	*9373	
*9262	367	1	0.352611E-02	*9263	*9372	380	1	0.102897E+02	*9374	
*9263	368	1	-2.18807E-01	*9264	*9373	381	1	0.527408E+00	*9375	
*9264	369	1	0.1356168E+00	*9265	*9374	382	1	0.337155E-01	*9376	
*9265	370	1	0.447717E+01	*9266	*9375	383	1	0.643374E+03	*9377	
*9266	371	1	0.122064E+02	*9267	*9376	384	1	-35.7044E+04	*9378	
*9267	372	1	0.882424E+01	*9268	*9377	385	1	0.322247E+05		
*9268	373	1	-4.79232E+02	*9269	*9378	386	1	-33.8835E+00	*9379	
*9269	375	1	0.117696E+00	*9270	DMIG	*VTAIL	387	1	-54.6516E+01	*9380
*9270	376	1	-55.18162E+00	*9271	*9379	357	1	0.188194E+00	*9382	
*9271	377	1	0.891771E+00	*9272	*9380	358	1	0.399533E-01	*9383	
*9272	378	1	-4.394205E+01	*9273	*9381	359	1	0.777587E-02	*9384	
*9273	379	1	-1.393878E+03	*9274	*9382	360	1	-9.05881E-03	*9385	
*9274	380	1	0.164894E+04	*9275	*9383	361	1	0.475235E-04	*9386	
*9275	381	1	-4.758105E+03	*9276	*9384	362	1	0.368288E-04	*9387	
*9276	382	1	0.179643E+04	*9277	*9385	363	1	-1.490398E-01	*9388	
DMIG	*VTAIL	383	1	*9277	*9386	364	1	0.085053E-01	*9389	
*9277	357	1	0.311274E-03	*9278	*9387	367	1	0.672132E-01	*9390	
*9278	358	1	-4.79934E-02	*9279	*9388	368	1	0.462911E-02	*9391	
*9279	359	1	0.182106E-01	*9280	*9389	369	1	-8.849053E-03	*9392	
*9280	360	1	-1.83852E+00	*9281	*9390	370	1	0.795566E-04	*9393	
*9281	361	1	-1.16182E+01	*9282	*9391	371	1	0.977434E-05	*9394	
*9282	362	1	-2.55904E+01	*9283	*9392	372	1	-9.060222E+02	*9395	
*9283	363	1	0.112750E+00	*9284	*9393	373	1	0.981460E+00	*9396	
*9284	364	1	-3.58622E+02	*9285	*9394	375	1	0.481161E-01	*9397	
*9285	367	1	-1.79107E-02	*9286	*9395	376	1	-89.1686E-03	*9398	
*9286	368	1	0.109064E-01	*9287	*9396	377	1	-75.3510E-03	*9399	
*9287	369	1	-79.7350E-01	*9288	*9397	378	1	-20.4675E-04	*9400	
*9288	370	1	-8.65236E+00	*9289	*9398	379	1	0.508574E-05	*9401	
*9289	371	1	-2.580866E+01	*9290	*9399	380	1	-6.08004E-07	*9402	
*9290	372	1	-3.18473E+01	*9291	*9400	381	1	0.551832E-07	*9403	
*9291	373	1	-2.493866E+01	*9292	*9401	382	1	-1.78513E-03	*9404	
*9292	375	1	0.754849E-01	*9293	*9402	383	1	0.105938E+04	*9405	
*9293	376	1	-2.71018E+00	*9294	*9403	384	1	-4.19783E+04	*9406	
*9294	377	1	0.703434E+00	*9295	*9404	385	1	0.497765E+04	*9407	
*9295	378	1	-6.161849E+01	*9296	*9405	386	1	0.396140E-01	*9408	
*9296	379	1	0.611220E+02	*9297	*9406	387	1	-88.3404E-01	*9409	
*9297	380	1	0.131950E+04	*9298	DMIG	*VTAIL	388	1	0.845446E+00	*9410
*9298	381	1	-6.534545E+03	*9299	*9407	357	1	-4.68879E+01	*9411	
*9299	382	1	-6.443881E+03	*9300	*9408	358	1	0.502871E+02	*9412	
*9300	383	1	0.830302E+03	*9301	*9409	359	1	0.250159E+03	*9413	
DMIG	*VTAIL	384	1	*9301	*9410	360	1	0.874634E+03	*9414	
*9301	357	1	0.265263E+05	*9302	*9411	361	1	0.134833E+04	*9415	
*9302	358	1	0.282354E+05	*9303	*9412	362	1	0.310222E-01	*9416	
*9303	359	1	-9.48610E+04	*9304	*9413	363	1	-2.36734E+00	*9417	
*9304	360	1	-2.193148E+04	*9305	*9414	364	1	0.235626E+01	*9418	
*9305	361	1	-4.750108E+03	*9306	*9415	367	1	0.161871E+02	*9419	
*9306	362	1	0.553337E+02	*9307	*9416	368	1	0.211136E+02	*9420	
*9307	363	1	0.194540E+01	*9308	*9417	369	1	-9.61292E+03	*9421	
*9308	364	1	-3.384202E+01	*9309	*9418	370	1	0.278446E+03	*9422	
*9309	367	1	0.284932E+04	*9310	*9419	371	1	0.102905E+02	*9423	
*9310	368	1	-1.164485E+04	*9311	*9420	372	1	-3.036602E+01	*9424	
*9311	369	1	-3.398898E+04	*9312	*9421	373	1	-85.9051E+03	*9425	
*9312	370	1	-1.574208E+03	*9313	*9422	375	1	0.185899E+02	*9426	
*9313	371	1	0.485381E+02	*9314	*9423	376	1	-10.60616E+03	*9427	
*9314	372	1	-9.264151E+05	*9315	*9424	377	1	0.590076E+03	*9428	
*9315	373	1	-1.20239E+01	*9316	*9425	378	1	-1.53037E+05	*9429	
*9316	375	1	-5.569315E+06	*9317	*9426	379	1	-1.24016E+04	*9430	
*9317	376	1	-9.48471E+05	*9318	*9427	380	1	-30.36602E+01	*9431	
*9318	377	1	-3.709248E+04	*9319	*9428	381	1	-85.9051E+03	*9432	
*9319	378	1	-1.573101E+03	*9320	*9429	382	1	0.185899E+02	*9433	
*9320	379	1	0.111069E+03	*9321	*9430	383	1	-10.60616E+03	*9434	
*9321	380	1	-1.824848E+02	*9322	*9431	384	1	0.590076E+03	*9435	
*9322	381	1	0.664130E+01	*9323	*9432	385	1	-1.60275E+04		
*9323	382	1	0.991842E-01	*9324	*9433	386	1	0.483130E+05		
*9324	383	1	0.593776E-01	*9325	*9434	387	1	-2.047398E+01		
*9325	384	1	0.149748E+07	*9326	DMIG	*VTAIL	389	1	0.103213E+02	*9436
DMIG	*VTAIL	385	1	*9326	*9436	357	1	0.166475E+01	*9437	
*9326	357	1	0.710800E+01	*9327	*9437	358	1	-5.73260E+01	*9438	
*9327	358	1	0.285959E+03	*9328	*9438	359	1	0.114762E+02	*9439	
*9328	359	1	-4.43238E+03	*9329	*9439	360	1	-1.21702E+01	*9440	
*9329	360	1	0.490161E+04	*9330	*9440	361	1	-2.36661E+01	*9441	
*9330	361	1	-3.233609E+03	*9331	*9441	362	1	0.275941E-01	*9442	
*9331	362	1	0.898562E+02	*9332	*9442	363	1	-1.44762E+02	*9443	
*9332	363	1	-79.5076E+01	*9333	*9443	364	1	-1.12184E+02	*9444	
*9333	364	1	-4.066668E+01	*9334	*9444	367	1	-4.53988E+00	*9445	
*9334	367	1	0.952642E+02	*9335	*9445	368	1	-2.69597E+01	*9446	
*9335	368	1	0.256148E+03	*9336	*9446	369	1	-2.047398E+01	*9447	
*9336	369	1	0.903557E+03	*9337	*9447	370	1	-1.41008E+00	*9448	
*9337	370	1	0.597798E+03	*9338	*9448	371	1	0.258631E-01	*9449	
*9338	371	1	0.124134E+03	*9339	*9449	372	1	-2.42336E+02	*9450	
*9339	372	1	-4.70681E+01	*9340	*9450	373	1	-2.97737E-03	*9451	
*9340	373	1	-3.73270E+00	*9341	*9451	375	1	0.292616E+04	*9452	
*9341	375	1	-1.39221E+04	*9342	*9452	376	1	-2.99786E+02	*9453	
*9342	376	1	-4.19824E+03	*9343	*9453	377	1	-1.465567E+01	*9454	
*9343	377	1	-3.51213E+05	*9344	*9454	378	1	0.271617E-01	*9455	
*9344	378	1	-5.80778E+03	*9345	*9455	379	1	0.229527E+01	*9456	
*9345	379	1	0.515640E+02	*9346	*9456	379	1	0.623463E-03	*9457	
*9346	380	1	0.268160E+01	*9347	*9457	381				

*9461	385	1	0.187243E+04	*9462	+9535	372	1	-111039E+03	*9536	
*9462	386	1	0.147890E+03	*9463	+9536	373	1	0.574412E+01	*9537	
*9463	387	1	-0.164456E+02	*9464	+9537	375	1	-181739E+05	*9538	
*9464	388	1	0.463955E+01	*9465	+9538	376	1	0.814804E+04	*9539	
*9465	389	1	0.507054E+04	*9466	+9539	377	1	0.725627E+02	*9540	
DMIG	*VTAIL	390	1	*9467	+9540	378	1	0.203894E+03	*9541	
*9466	384	1	0.243494E+04	*9468	+9541	379	1	0.126076E+02	*9542	
*9467	385	1	-0.408017E+04	*9469	+9542	380	1	-261081E+01	*9543	
*9468	386	1	0.137165E+04	*9470	+9543	381	1	0.555171E+00	*9544	
*9469	387	1	-0.414326E+04	*9471	+9544	382	1	0.415987E-02	*9545	
*9470	390	1	0.591447E+04	*9472	+9545	383	1	0.517604E-02	*9546	
DMIG	*VTAIL	391	1	*9473	+9546	384	1	0.106276E+05	*9547	
*9471	385	1	0.137165E+04	*9474	+9547	385	1	-226352E+02	*9548	
*9472	386	1	-0.273356E+04	*9475	+9548	386	1	0.519700E+02	*9549	
*9473	387	1	0.123460E+04	*9476	+9549	387	1	0.257476E+00	*9550	
*9474	389	1	0.729919E+02	*9477	+9550	388	1	0.673053E+00	*9551	
*9475	390	1	-0.16003E+04	*9478	+9551	389	1	-784298E+01	*9552	
*9476	391	1	0.320895E+04	*9479	+9552	406	1	0.131935E+05	*9553	
DMIG	*VTAIL	392	1	*9477	+9553	407	5	0.195301E+08		
*9477	386	1	0.123460E+04	DMIG	*VTAIL	408	1	0.744264E+03	*9587	
*9478	387	1	-0.183606E+04	*9478	+9587	357	1	0.120044E+03	*9588	
*9479	388	1	0.532735E+03	*9479	+9588	358	1	-413768E+03	*9589	
*9480	389	1	-0.270690E+02	*9480	+9589	359	1	-877589E+02	*9590	
*9481	390	1	0.120338E+03	*9481	+9590	360	1	-170800E+02	*9591	
*9482	391	1	-0.161773E+04	*9482	+9591	361	1	0.198980E+01	*9593	
*9483	392	1	0.207529E+04	*9483	+9592	362	1	-104387E+00	*9594	
DMIG	*VTAIL	393	1	*9484	+9593	363	1	-808958E-01	*9595	
*9484	387	1	0.571031E+03	*9485	+9594	364	1	0.327369E+02	*9596	
*9485	388	1	-0.673689E+03	*9486	+9595	367	1	-194045E+03	*9597	
*9486	389	1	0.223540E+01	*9487	+9596	368	1	-147636E+03	*9598	
*9487	390	1	-0.995771E+01	*9488	+9597	369	1	-101680E+02	*9599	
*9488	391	1	0.711305E+02	*9489	+9598	370	1	0.186498E+01	*9600	
*9489	392	1	-0.482110E+03	*9490	+9599	371	1	-174749E+00	*9601	
*9490	393	1	0.521340E+03	*9491	+9600	372	1	-214697E-01	*9602	
DMIG	*VTAIL	406	1	-0.173625E+05	*9492	+9601	373	1	0.211004E+06	*9603
*9491	357	1	-0.280045E+04	*9493	+9603	376	1	-216175E+04	*9604	
*9492	358	1	0.964342E+04	*9494	+9604	377	1	-105689E+03	*9605	
*9493	359	1	0.204728E+04	*9495	+9605	378	1	0.195862E+01	*9606	
*9494	360	1	0.398450E+03	*9496	+9606	379	1	0.165511E+01	*9607	
*9495	361	1	-0.641908E+02	*9497	+9607	380	1	0.449577E-01	*9608	
*9496	362	1	0.243519E+01	*9498	+9608	381	1	-111710E-01	*9609	
*9497	363	1	0.188718E+01	*9499	+9609	382	1	0.133726E-03	*9610	
*9498	364	1	-0.767302E+03	*9500	+9610	383	1	-121212E-03	*9611	
*9499	367	1	0.453518E+04	*9501	+9611	384	1	0.418267E+05	*9612	
*9500	368	1	0.344413E+04	*9502	+9612	385	1	0.214221E+03	*9613	
*9501	369	1	0.237204E+03	*9503	+9613	386	1	0.454942E+02	*9614	
*9502	370	1	-0.435070E+02	*9504	+9614	387	1	0.145153E+02	*9615	
*9503	371	1	0.407663E+01	*9505	+9615	388	1	-144600E+01	*9616	
*9504	372	1	0.500855E+00	*9506	+9616	389	1	-442150E+03	*9617	
*9505	373	1	-0.443406E+06	*9507	+9617	406	1	-361694E+06	*9618	
*9506	375	1	0.504032E+05	*9508	+9618	407	5	-565555E+03	*9619	
*9507	376	1	0.2466556E+04	*9509	+9619	407	1	0.834648E+02	*9620	
*9508	377	1	-0.456917E+02	*9510	+9620	408	1	0.109547E+06		
*9509	378	1	-0.386113E+02	*9511	DMIG	*VTAIL	409	1	-262206E+05	*9656
*9511	380	1	-0.104808E+01	*9512	+9656	357	1	-103588E+04	*9658	
*9512	381	1	0.260603E+00	*9513	+9657	358	1	0.214164E+04	*9659	
*9513	382	1	-0.319635E+02	*9514	+9658	359	1	0.293531E+03	*9660	
*9514	383	1	0.282769E+02	*9515	+9659	360	1	0.269486E+02	*9661	
*9515	384	1	-0.968350E+06	*9516	+9660	361	1	-242846E+01	*9662	
*9516	385	1	0.197004E+04	*9517	+9661	362	1	0.525678E-01	*9663	
*9517	386	1	-0.358031E+03	*9518	+9662	363	1	0.172744E+00	*9664	
*9518	387	1	0.100278E+03	*9519	+9663	364	1	0.323348E+04	*9665	
*9519	388	1	-0.101088E+02	*9520	+9664	367	1	0.215706E+04	*9666	
*9520	389	1	-0.305457E+04	*9521	+9665	368	1	0.503979E+03	*9667	
*9521	406	1	0.176490E+07	*9522	+9666	369	1	-246870E+02	*9668	
DMIG	*VTAIL	407	1	*9523	+9667	370	1	-255333E+01	*9669	
*9524	357	1	-0.911903E+05	*9525	+9668	371	1	0.924261E+00	*9670	
*9525	358	1	0.728130E+04	*9526	+9669	372	1	0.127325E-01	*9671	
*9526	359	1	0.231467E+03	*9527	+9670	373	1	0.458756E+05	*9672	
*9527	360	1	-0.841305E+02	*9528	+9671	375	1	0.207304E+03	*9673	
*9528	361	1	0.529257E+01	*9529	+9672	376	1	0.280582E+02	*9674	
*9529	362	1	-0.984070E+00	*9530	+9673	377	1	-203789E+02	*9675	
*9530	363	1	0.155806E+00	*9531	+9674	378	1	-339806E+01	*9676	
*9531	364	1	0.153670E+01	*9532	+9675	379	1	-120555E+00	*9677	
*9532	367	1	-0.501667E+05	*9533	+9676	380	1	0.420144E-01	*9678	
*9533	368	1	0.666399E+03	*9534	+9677	381	1	0.823926E-04	*9679	
*9534	369	1	-0.912111E+02	*9535	+9678	382	1	0.414972E-03	*9680	
*9535	370	1	-0.938795E+00	*9536	+9679	383	1	0.520328E+05	*9681	
*9536	371	1	0.891667E+00	*9537	+9680	384	1	0.124228E+01	*9682	
*9537	372	1	-0.955200E+00	*9538	+9681	385	1	-178476E+01	*9683	
*9538	373	1	0.604210E-01	*9539	+9682	386	1	-785608E+00	*9684	
*9539	375	1	-0.290253E+04	*9540	+9683	387	1	0.666356E-01	*9685	
*9540	376	1	0.644413E+03	*9541	+9684	388	1	0.239304E+02	*9686	
*9541	377	1	0.589231E+02	*9542	+9685	389	1	-402560E+05	*9687	
*9542	378	1	0.925670E+00	*9543	+9686	406	1	0.430355E+05	*9688	
*9543	379	1	0.568770E+00	*9544	+9687	407	5	0.785184E+04	*9689	
*9544	380	1	-0.965196E+01	*9545	+9688	407	1	0.172562E+04	*9690	
*9545	381	1	0.253072E+01	*9546	+9689	408	1	0.179613E+06	*9691	
*9546	382	1	-0.225246E+03	*9547	+9690	409	5	0.431661E+05		
*9547	383	1	0.233053E+03	*9548	+9691	409	1	-145670E+01	*9621	
*9548	384	1	0.675815E+04	*9549	+9692	364	1	-615575E+04	*9622	
*9549	385	1	-0.939438E+00	*9550	+9693	365	1	-153980E+05	*9623	
*9550	386	1	0.715955E+00	*9551	+9694	369	1	-392419E+04	*9624	
*9551	387	1	-0.379983E+01	*9552	+9695	359	1	-182427E+03	*9625	
*9552	388	1	0.102725E+01	*9553	+9696	360	1	0.179957E+02	*9626	
*9553	389	1	0.115747E+01	*9554	+9697	361	1	-376324E+01	*9627	
*9554	406	1	-0.194711E+04	*9555	+9698	362	1	-744120E+00	*9628	
*9555	407	5	0.676867E+06	*9556	+9699	363	1	-145670E+01	*9629	
*9556	407	5	0.122983E+06	*9557	+9699	367	1	-615575E+04	*9630	
*9557	357	1	0.191080E+06	*9558	+9699	368	1	-153980E+05	*9631	
*9558	358	1	-0.356714E+05	*9559	+9699	369	1	-392419E+04	*9632	
*9559	359	1	-0.280960E+05	*9560	+9699	370	1	-182427E+03	*9633	
*9560	360	1	-0.160270E+04	*9561	+9699	371	1	0.179957E+02	*9634	
*9561	361	1	-0.918511E+02	*9562	+9699	372	1	-376324E+01	*9635	
*9562	362	1	-0.156290E+02	*9563	+9699	373	1	-241942E+00	*9636	
*9563	363	1	0.105740E+02	*9564	+9699	375	1	-145521E+06	*9637	
*9564	364	1	-0.110634E+01	*9565	+9699	376	1	-194645E+04	*9638	
*9565	367	1	-0.804513E+06	*9566	+9699	377	1	-813680E+03	*9639	
*9566	368	1	-0.532051E+05	*9567	+9699	378	1	0.145115E+03	*9640	
*9567	369	1	-0.187041E+04	*9568	+9699	379	1	0.267615E+02	*9641	
*9568	370									

*9643	382	1	-347133E-02	*9644	GRID	102	0	-139.738-401.269.000	0
*9644	383	1	-417601E-02	*9645	GRID	103	0	-129.345-400.438.000	0
*9645	384	1	-184205E+02	*9646	GRID	104	0	-109.713-396.867.000	0
*9646	385	1	-595504E+02	*9647	GRID	105	0	-84.161-396.923.000	0
*9647	386	1	0.172236E+02	*9648	GRID	106	0	-53.000-394.330.000	0
*9648	387	1	0.503546E+01	*9649	GRID	107	0	-41.500-393.410.000	0
*9649	388	1	-4.13289E+00	*9650	GRID	108	0	-139.738-404.997.000	0
*9650	389	1	-153385E+03	*9651	GRID	109	0	-128.703-404.537.000	0
*9651	406	1	0.258026E+06	*9652	GRID	110	0	-108.954-403.714.000	0
*9652	407	5	0.882856E+05	*9653	GRID	111	0	-83.248-402.642.000	0
*9653	407	1	0.627916E+05	*9654	GRID	112	0	-53.000-401.381.000	0
*9654	408	1	-110606E+05	*9655	GRID	113	0	-41.500-400.902.000	0
*9655	409	5	0.437083E+07	EIGR	1	MGIV	0.	30.	+EIG1
+EIG1	MAX				GRID	114	0	-41.500-417.400.000	0
GRID	1	5	-136.6059.331 .000	0	GRID	115	0	-25.500-417.400.000	0
GRID	2	5	-131.7509.602 .000	0	GRID	116	0	-25.500-417.400.000	0
GRID	3	5	-100.75011.331 .000	0	GRID	117	0	.000 -417.40 .000	0
GRID	4	5	-75.750 12.725 .000	0	GRID	118	0	-39.431 -373.800.000	0
GRID	5	5	-40.750 14.678 .000	0	GRID	119	0	-38.792 -377.878.000	7
GRID	6	5	0.000 17.047 .000	0	GRID	120	0	-32.601 -417.400.000	0
GRID	7	5	24.947 18.341 .000	0	GRID	121	0	-41.501 -373.800.000	0
GRID	8	5	-141.0943.076 .000	0	GRID	122	0	-120.926-390.747.000	0
GRID	9	0	-170.615 -371.062.000	5	GRID	123	0	-101.524 -387.707.000	0
GRID	10	5	-100.7503.353 .000	0	GRID	124	0	-70.415 -382.833.000	0
GRID	11	0	-145.429-352.988.000	5	GRID	125	0	-120.235 -395.153.000	0
GRID	12	5	-75.750 3.524 .000	0	GRID	126	0	-100.719 -392.843.000	0
GRID	13	0	-125.118 -338.412.000	5	GRID	127	0	-69.427 -389.140.000	0
GRID	14	5	-40.750 3.763 .000	0	GRID	128	0	-119.530 -399.653.000	0
GRID	15	0	-96.682 -318.006.000	5	GRID	129	0	-99.898 -399.082.000	0
GRID	16	5	0.000 4.054 .000	0	GRID	130	0	-68.428 -395.564.000	0
GRID	17	0	-63.574 -294.247.000	5	GRID	131	0	-118.830 -404.125.000	0
GRID	18	5	14.758 4.143 .000	0	GRID	132	0	-99.081 -403.302.000	0
GRID	19	0	-180.000 -381.378.000	0	GRID	133	0	-67.414 -401.982.000	0
GRID	20	0	-168.385 -374.169.000	1	GRID	134	0	-139.738 -394.695.000	7
GRID	21	0	-157.000 -366.154.000	0	GRID	135	0	-130.473 -393.243.000	7
GRID	22	0	-147.640 -359.565.000	0	GRID	136	0	-120.773 -391.723.000	7
GRID	23	0	-143.035 -356.324.000	1	GRID	137	0	-111.071 -390.203.000	7
GRID	24	0	-139.738 -354.003.000	0	GRID	138	0	-101.371 -388.683.000	7
GRID	25	0	-122.591 -341.932.000	1	GRID	139	0	-85.817 -386.246.000	7
GRID	26	0	-120.000 -340.108.000	0	GRID	140	0	-70.262 -383.809.000	7
GRID	27	0	-93.970 -321.785.000	1	GRID	141	0	-53.000 -381.104.000	7
GRID	29	0	-86.000 -316.174.000	0	GRID	142	0	-41.500 -379.302.000	7
GRID	30	0	-60.647 -298.327.000	1	GRID	143	0	-180.000 -389.378.000	0
GRID	31	0	-41.500 -293.800.000	0	GRID	153	0	.000 -100.00 .000	0
GRID	32	0	-54.216 -293.800.000	0	GRID	154	0	.000 -160.00 .000	0
GRID	33	0	-41.500 -293.800.000	0	GRID	155	0	.000 -200.00 .000	0
GRID	34	0	-25.500 -293.800.000	0	GRID	156	0	.000 -252.50 .000	0
GRID	35	0	-25.500 -293.800.000	0	GRID	163	0	.000 -60.00 .000	0
GRID	36	0	-25.500 -293.800.000	0	GRID	164	0	.000 -78.80 .000	0
GRID	37	0	-41.500 -308.500.000	0	GRID	173	5	-116.25010.466 .000	0
GRID	38	0	-54.216 -310.784.000	0	GRID	174	5	-88.250 12.029 .000	0
GRID	39	0	-41.500 -308.500.000	0	GRID	175	5	-58.250 13.701 .000	0
GRID	40	0	-25.500 -308.500.000	0	GRID	176	5	-19.500 15.863 .000	0
GRID	41	0	-25.500 -308.500.000	0	GRID	177	5	-116.2503.247 .000	0
GRID	42	0	.000 -308.50 .000	0	GRID	178	5	-88.250 3.438 .000	0
GRID	44	0	-86.000 -332.494.000	0	GRID	179	5	-58.250 3.643 .000	0
GRID	45	0	-41.500 -324.500.000	0	GRID	180	5	-19.500 3.908 .000	0
GRID	46	0	-54.216 -326.784.000	0	GRID	181	0	-71.000 -305.615.000	0
GRID	47	0	-41.500 -324.500.000	0	GRID	182	0	-71.000 -313.799.000	0
GRID	48	0	-25.500 -324.500.000	0	GRID	183	0	-71.000 -329.799.000	0
GRID	49	0	-25.500 -324.500.000	0	GRID	184	0	-71.000 -345.799.000	0
GRID	50	0	.000 -324.50 .000	0	GRID	185	0	-71.000 -361.799.000	0
GRID	51	0	-139.738 -358.146.000	0	GRID	186	0	-71.000 -379.099.000	7
GRID	52	0	-120.000 -354.601.000	0	GRID	187	0	-102.000 -327.437.000	0
GRID	53	0	-86.000 -348.494.000	0	GRID	188	0	-102.000 -335.367.000	0
GRID	54	0	-41.500 -340.500.000	0	GRID	189	0	-102.000 -351.367.000	0
GRID	55	0	-54.216 -342.784.000	0	GRID	190	0	-102.000 -367.367.000	0
GRID	56	0	-41.500 -340.500.000	0	GRID	191	0	-102.000 -384.667.000	7
GRID	57	0	-25.500 -340.500.000	0	GRID	192	0	-131.000 -347.852.000	0
GRID	58	0	-25.500 -340.500.000	0	GRID	193	0	-131.000 -356.576.000	0
GRID	59	0	.000 -340.50 .000	0	GRID	194	5	-131.7503.141 .000	0
GRID	60	0	-168.385 -379.292.000	0	GRID	195	0	.000 -385.600.000	0
GRID	61	0	-157.000 -377.247.000	0	GRID	196	0	.000 -447.000.000	0
GRID	62	0	-139.738 -374.146.000	0	GRID	197	0	-67.903 -482.9730.0	0
GRID	63	0	-131.000 -372.576.000	0	GRID	198	0	-81.403 -493.1590.0	0
GRID	64	0	-120.000 -370.601.000	0	GRID	199	0	-92.653 -501.6460.0	0
GRID	65	0	-86.000 -364.494.000	0	GRID	200	0	-103.065 -509.5170.0	0
GRID	66	0	-41.500 -356.500.000	0	GRID	201	0	-110.127-514.8300.0	0
GRID	67	0	-54.216 -358.784.000	0	GRID	202	0	-57.952 -504.9420.0	0
GRID	68	0	-41.500 -356.500.000	0	GRID	203	0	-72.299 -513.2610.0	0
GRID	69	0	-25.500 -356.500.000	0	GRID	204	0	-84.253 -520.1930.0	0
GRID	70	0	-25.500 -356.500.000	0	GRID	205	0	-95.332 -526.6210.0	0
GRID	71	0	.000 -356.50 .000	0	GRID	206	0	-110.127-535.1970.0	0
GRID	72	0	-180.000 -398.678.000	0	GRID	207	0	-41.500 -541.2650.0	0
GRID	73	0	-168.385 -396.592.000	0	GRID	208	0	-59.060 -542.4880.0	0
GRID	74	0	-157.000 -394.547.000	0	GRID	209	0	-73.693 -543.5080.0	0
GRID	75	0	-139.738 -391.446.000	0	GRID	210	0	-87.261 -544.4530.0	0
GRID	76	0	-131.000 -389.876.000	7	GRID	211	0	-102.862 -545.5400.0	0
GRID	77	0	-120.000 -387.901.000	0	GRID	212	0	.000 -153.25 .000	0
GRID	78	0	-86.000 -381.794.000	0	GRID	213	0	-36.000 -469.194.000	0
GRID	79	0	-29.250 -417.400.000	0	GRID	214	0	-36.000 -497.500.000	0
GRID	80	0	-54.216 -376.084.000	0	GRID	215	0	-40.750 -497.500.000	0
GRID	81	0	-41.500 -373.800.000	7	GRID	216	0	-40.750 -479.550.000	0
GRID	82	0	-25.500 -373.800.000	0	GRID	217	0	-29.250 -479.550.000	0
GRID	83	0	-25.500 -373.800.000	0	GRID	218	0	-40.750 -469.194.000	0
GRID	84	0	.000 -373.80 .000	0	GRID	219	0	-36.000 -497.500.000	0
GRID	85	0	-180.000 -406.675.000	0	GRID	220	0	-29.250 -497.500.000	0
GRID	86	0	-168.385 -406.191.000	0	GRID	221	0	-40.750 -497.500.000	0
GRID	87	0	-157.000 -405.717.000	0	GRID	222	0	-40.750 -479.550.000	0
GRID	88	0	-139.738 -404.997.000	0	GRID	223	0	-29.250 -479.550.000	0
GRID	89	0	-139.738 -393.695.000	0	GRID	224	0	-40.750 -469.194.000	0
GRID	90	0	-130.626 -392.267.000	0	GRID	225	0	-36.000 -469.194.000	0
GRID	91	0	-111.224 -389.227.000	0	GRID	226	0	-36.000 -497.500.000	0
GRID	92	0	-85.970 -385.270.000	0	GRID	227	0	-29.250 -497.500.000	0
GRID	93	0	-53.000 -380.104.000	0	GRID	228	0	-40.750 -462.820.000	0
GRID	94	0	-29.250 -373.800.000	0	GRID	229	0	.000 -479.55 .000	0
GRID	95	0	-41.500 -378.302.000	0	GRID	230	0	.000 -462.82 .000	0
GRID	96	0	-139.738 -397.461.000	0	GRID	231	0	.000 -446.10 .000	0
GRID	97	0	-129.592 -396.307.000	0	GRID	232	0	.000 -447.00 .000	0
GRID	98	0	-110.476 -393.998.000	0	GRID	233	0	.000 -424.00 .000	0
GRID	99	0	-85.073 -390.992.000	0	GRID	234	0	.000	

GRID	292	0	-40.750	-446.100.000	0		GRID	1038	0	-54.216	-310.784.852	0		
GRID	293	0	-29.250	-446.100.000	0		GRID	1039	0	-41.500	-308.5003.166	0		
GRID	294	0	-29.250	-446.100.000	0		GRID	1040	0	-25.500	-308.5001.350	0		
GRID	295	0	-19.000	-446.100.000	0		GRID	1044	0	-86.000	-332.4942.350	0		
GRID	296	0	.000	-426.400.000	0		GRID	1045	0	-41.500	-324.5005.450	0		
GRID	298	0	.000	-385.60 .000	0		GRID	1046	0	-54.216	-326.7842.750	0		
GRID	299	0	-33.570	-497.500.000	0		GRID	1047	0	-41.500	-324.5002.944	0		
GRID	300	0	-19.000	-417.400.000	0		GRID	1048	0	-25.500	-340.5010.350	0		
GRID	357	0	.000	-452.61825.500	0		GRID	1051	0	-139.738-358.1461.446	0			
GRID	358	0	.000	-469.42445.000	0		GRID	1052	0	-120.000-354.6011.763	0			
GRID	359	0	.000	-484.34962.317	0		GRID	1053	0	-86.000	-348.4942.112	0		
GRID	360	0	.000	-501.18481.850	0		GRID	1054	0	-41.500	-340.5005.450	0		
GRID	361	0	.000	-518.008101.371	0		GRID	1055	0	-54.216	-342.7842.426	0		
GRID	362	0	.000	-527.582112.479	0		GRID	1056	0	-41.500	-340.5002.598	0		
GRID	363	0	.000	-534.495120.500	0		GRID	1057	0	-25.500	-340.50010.750	0		
GRID	364	0	.000	-538.374125.000	0		GRID	1060	0	-168.385-379.292.984	0			
GRID	367	0	.000	-446.10044.849	0		GRID	1061	0	-157.000-377.2471.108	0			
GRID	368	0	.000	-472.31270.354	0		GRID	1062	0	-139.738-374.1461.256	0			
GRID	369	0	.000	-491.06888.605	0		GRID	1063	0	-131.000-372.5761.328	0			
GRID	370	0	.000	-509.812106.844	0		GRID	1064	0	-120.000-370.6011.418	0			
GRID	371	0	.000	-520.479117.222	0		GRID	1065	0	-86.000	-364.4941.676	0		
GRID	372	0	.000	-523.847120.500	0		GRID	1066	0	-41.500	-356.5005.800	0		
GRID	373	0	.000	-528.472125.000	0		GRID	1067	0	-54.216	-358.781.908	0		
GRID	375	0	.000	-492.59445.000	0		GRID	1068	0	-41.500	-356.5002.028	0		
GRID	376	0	.000	-498.20753.064	0		GRID	1069	0	-25.500	-356.50010.950	0		
GRID	377	0	.000	-512.83174.074	0		GRID	1072	0	-180.000-398.678.330	0			
GRID	378	0	.000	-527.44695.070	0		GRID	1073	0	-168.385-396.592.415	0			
GRID	379	0	.000	-535.762107.018	0		GRID	1074	0	-157.000-394.547.508	0			
GRID	380	0	.000	-545.147120.500	0		GRID	1075	0	-139.738-391.446.645	0			
GRID	381	0	.000	-548.279125.000	0		GRID	1076	0	-131.000-398.876.706	7			
GRID	382	0	.000	-560.736120.500	0		GRID	1077	0	-120.000-387.901.796	0			
GRID	383	0	.000	-563.088125.000	0		GRID	1078	0	-86.000	-381.7941.039	0		
GRID	384	0	.000	-498.05345.000	0		GRID	1079	0	-29.250	-417.4009.000	0		
GRID	385	0	.000	-516.03771.933	0		GRID	1080	0	-54.216	-376.0841.264	0		
GRID	386	0	.000	-530.24093.204	0		GRID	1081	0	-41.500	-373.8001.364	7		
GRID	387	0	.000	-538.321105.309	0		GRID	1082	0	-25.500	-373.80011.100	0		
GRID	388	0	.000	-548.465120.500	0		GRID	1085	0	-180.000-406.675.075	0			
GRID	389	0	.000	-521.28945.000	0		GRID	1086	0	-168.385-406.191.090	0			
GRID	390	0	.000	-530.36462.367	0		GRID	1087	0	-157.000-405.717.115	0			
GRID	391	0	.000	-542.27685.168	0		GRID	1088	0	-139.738-404.997.145	0			
GRID	392	0	.000	-549.05599.142	0		GRID	1094	0	-29.250	-373.8009.000	0		
GRID	393	0	.000	-560.736120.500	0		GRID	1096	0	-139.738-397.461.429	0			
GRID	405	0	.000	-500.00 .000	0		GRID	1097	0	-129.992-396.307.471	0			
GRID	406	0	.000	-498.24941.224	0		GRID	1098	0	-110.476-393.998.557	0			
GRID	407	0	.000	-446.10025.500	0		GRID	1099	0	-85.073	-390.992.669	0		
GRID	408	0	.000	-509.8923.450	0		GRID	1100	0	-53.000	-387.196.810	0		
GRID	409	0	.000	-479.02125.500	0		GRID	1101	0	-41.500	-385.835.659	0		
GRID	410	0	.000	-426.40 .000	0		GRID	1102	0	-128.703-404.537.167	0			
GRID	431	0	.000	-351.70 .000	0		GRID	1103	0	-129.345-400.438.318	0			
GRID	437	0	.000	-325.40 .000	0		GRID	1104	0	-109.713-398.867.377	0			
GRID	458	0	.000	-266.92 .000	0		GRID	1105	0	-84.160	-396.823.453	0		
GRID	459	0	.000	-274.55 .000	0		GRID	1106	0	-53.000	-394.330.545	0		
GRID	464	0	-29.250	-492.500.000	0		GRID	1107	0	-41.500	-393.4101.787	0		
GRID	465	0	-40.750	-492.500.000	0		GRID	1108	0	-139.738-404.997.150	0			
GRID	466	0	-29.250	-502.250.000	0		GRID	1109	0	-128.703-404.537.167	0			
GRID	467	0	-40.750	-502.250.000	0		GRID	1110	0	-108.954-403.714.198	0			
GRID	501	0	-54.702	-473.0130.	0		GRID	1111	0	-83.248	-402.642.238	0		
GRID	502	0	-74.653	-488.0660.	0		GRID	1112	0	-53.000	-401.381.285	0		
GRID	503	0	-87.028	-497.4020.	0		GRID	1113	0	-41.500	-400.902.925	0		
GRID	504	0	-97.869	-505.5820.	0		GRID	1114	0	-41.500	-401.4009.000	0		
GRID	505	0	-106.606	-512.1740.	0		GRID	1121	0	-41.500	-373.8005.850	0		
GRID	506	0	-41.5	-480.2760.	0		GRID	1125	0	-120.235-395.153.514	0			
GRID	507	0	-62.928	-493.9580.	0		GRID	1126	0	-100.719-392.843.669	0			
GRID	508	0	-76.851	-503.2100.	0		GRID	1127	0	-69.427	-389.140.737	0		
GRID	509	0	-88.453	-510.9200.	0		GRID	1128	0	-119.530-393.653.348	0			
GRID	510	0	-99.212	-518.0690.	0		GRID	1129	0	-99.898	-396.082.406	0		
GRID	511	0	-110.127	-525.0140.	0		GRID	1130	0	-68.420	-395.564.500	0		
GRID	512	0	-49.726	-501.2210.	0		GRID	1131	0	-118.830-404.125.182	0			
GRID	513	0	-65.126	-509.1020.	0		GRID	1132	0	-99.081	-403.302.213	0		
GRID	514	0	-78.276	-516.7270.	0		GRID	1133	0	-67.414	-401.982.263	0		
GRID	515	0	-89.796	-523.4070.	0		GRID	1134	0	-139.738-394.695.531	7			
GRID	516	0	-102.733	-530.9090.	0		GRID	1135	0	-130.473-393.243.505	7			
GRID	517	0	-41.5	-519.3830.	0		GRID	1136	0	-120.773-391.723.641	7			
GRID	518	0	-49.726	-523.1040.	0		GRID	1137	0	-111.071	-390.203.697	0		
GRID	519	0	-65.680	-527.8750.	0		GRID	1138	0	-101.371-388.683.754	7			
GRID	520	0	-78.973	-531.8050.	0		GRID	1139	0	-85.817	-386.246.844	7		
GRID	521	0	-91.3	-535.5370.	0		GRID	1140	0	-70.262	-383.809.934	7		
GRID	522	0	-106.495	-540.3680.	0		GRID	1141	0	-53.000	-381.1041.050	7		
GRID	523	0	-50.28	-541.8760.	0		GRID	1142	0	-41.500	-379.3023.412	7		
GRID	524	0	-66.376	-542.9980.	0		GRID	1143	0	-180.000	-389.378.675	0		
GRID	525	0	-80.477	-544.0080.	0		GRID	1173	5	-116.25010.466	-453	0		
GRID	526	0	-95.062	-544.9960.	0		GRID	1174	5	-88.250	-12.029	.640	0	
GRID	701	3	0.	0.	0.		GRID	1175	5	-58.250	-13.701	.795	0	
GRID	702	3	100.	0.	0.		GRID	1176	5	-19.500	-15.863	1.015	0	
GRID	703	3	0.	0.	-100.		GRID	1177	5	-116.250	-237.447	.990	0	
GRID	1001	5	-136.6059	-331.355	0		GRID	1178	5	-88.250	-3.438	1.303	0	
GRID	1002	5	-131.7509	-602.382	0		GRID	1179	5	-58.250	-3.643	1.590	0	
GRID	1003	5	-100.75011	-331.560	0		GRID	1180	5	-19.500	-3.900	1.980	0	
GRID	1004	5	-75.750	-12.725	.700		GRID	1181	0	-71.000	-305.6152.359	0		
GRID	1005	5	-40.750	-14.678	.895		GRID	1182	0	-71.000	-313.7992.486	0		
GRID	1006	5	0.000	-17.047	1.115	0		GRID	1183	0	-71.000	-329.7992.524	0	
GRID	1007	5	24.947	-18.341	1.245	0		GRID	1184	0	-71.000	-345.7992.242	0	
GRID	1008	5	-141.0943	-0.076	.845	0		GRID	1185	0	-71.000	-361.7991.776	0	
GRID	1010	5	-100.7503	-353	1.150	0		GRID	1186	0	-71.000	-379.0991.136	0	
GRID	1012	5	-75.750	-3.524	1.410	0		GRID	1187	0	-102.000	-327.4371.904	0	
GRID	1014	5	-40.750	-3.763	1.765	0		GRID	1188	0	-102.000	-335.3672.032	0	
GRID	1016	5	0.000	-4.054	2.190	0		GRID	1189	0	-102.000	-351.3671.954	0	
GRID	1018	5	14.758	-4.143	2.080	0		GRID	1190	0	-102.000	-367.3671.559	0	
GRID	1019	0	-180.000	-381.378	.790	0		GRID	1191	0	-102.000	-384.667.924	0	
GRID	1020	0	-168.385	-374.169	.965	1		GRID	1192	0	-131.000	-347.8521.517	0	
GRID	1021	0	-157.000	-366.1541	.560	0		GRID	1193	0	-131.000	-356.5761.617	0	
GRID	1022	0	-147.640	-359.5651	.284	0		GRID	1194	5	-131.7503	-141	.875	0
GRID	1023	0	-143.035	-356.3241	.358	1		GRID	1233	0	-41.500	-497.5002.790	0	
GRID	1024	0	-139.738	-354.0031	.400	0		GRID	1242	0	-168.385	-387.292.764	0	
GRID	1025	0	-122.591	-341.9321	.635	1		GRID	1243	0	-157.000	-385.247.862	0	
GRID	1026	0	-120.000	-340.1081	.663	0		GRID	124					

GRID	1258	0	-72.299	-513.2611.801	0		GRID	2094	0	-29.250	-373.800-9.000	0	
GRID	1259	0	-84.253	-520.1931.437	0		GRID	2096	0	-139.738-397.461-429	0		
GRID	1260	0	-95.338	-526.6211.091	0		GRID	2097	0	-129.992-396.307-471	0		
GRID	1261	0	-110.127-535.197.606	0			GRID	2098	0	-110.476-393.998-557	0		
GRID	1262	0	-41.500	-541.265.833	0		GRID	2099	0	-85.073-390.992-669	0		
GRID	1263	0	-59.060	-542.488.670	0		GRID	2100	0	-53.004-387.196-810	0		
GRID	1264	0	-73.693	-543.508.531	0		GRID	2101	0	-41.500-385.835-2.659	0		
GRID	1265	0	-87.261	-544.453.399	0		GRID	2102	0	-139.738-401.269-288	0		
GRID	1266	0	-102.862-545.540.248	0			GRID	2103	0	-129.345-400.438-318	0		
GRID	1275	0	-40.750	-479.5509.000	0		GRID	2104	0	-109.713-398.867-377	0		
GRID	1276	0	-29.250	-479.5506.150	0		GRID	2105	0	-84.160-396.823-453	0		
GRID	1280	0	-40.750	-462.8205.500	0		GRID	2106	0	-53.004-394.330-545	0		
GRID	1290	0	-29.250	-462.8207.000	0		GRID	2107	0	-41.500-393.410-1.787	0		
GRID	1292	0	-40.750	-466.1005.650	0		GRID	2108	0	-139.738-404.997-150	0		
GRID	1293	0	-29.250	-446.1007.000	0		GRID	2109	0	-128.703-404.537-167	0		
GRID	1464	0	-29.250	-492.5004.500	0		GRID	2110	0	-108.954-403.714-198	0		
GRID	1465	0	-40.750	-492.5004.750	0		GRID	2111	0	-83.244-402.642-238	0		
GRID	1466	0	-29.250	-502.2503.000	0		GRID	2112	0	-53.004-401.381-285	0		
GRID	1467	0	-40.750	-502.2504.250	0		GRID	2113	0	-41.500-400.902-925	0		
GRID	1501	0	-54.702	-473.0130.868	0		GRID	2114	0	-41.500-417.400-9.000	0		
GRID	1502	0	-74.653	-488.0660.638	0		GRID	2121	0	-41.500-373.800-5.850	0		
GRID	1503	0	-87.028	-497.0420.495	0		GRID	2125	0	-120.235-395.153-514	0		
GRID	1504	0	-97.869	-505.5820.370	0		GRID	2126	0	-100.719-392.843-669	0		
GRID	1505	0	-106.606-512.1740.268	0			GRID	2127	0	-69.427-389.140-737	0		
GRID	1506	0	-41.5	-480.2761.906	0		GRID	2128	0	-119.530-399.653-348	0		
GRID	1507	0	-62.928	-493.9581.610	0		GRID	2129	0	-99.894-398.082-406	0		
GRID	1508	0	-76.851	-503.2101.180	0		GRID	2130	0	-68.420-395.564-500	0		
GRID	1509	0	-88.453	-510.9200.934	0		GRID	2131	0	-118.830-404.125-182	0		
GRID	1510	0	-99.212	-518.0690.700	0		GRID	2132	0	-99.081-403.302-213	0		
GRID	1511	0	-110.127-525.0140.417	0			GRID	2133	0	-67.414-401.982-263	0		
GRID	1512	0	-49.726	-501.2212.646	0		GRID	2134	0	-139.738-394.695-531	7		
GRID	1513	0	-65.125	-509.1022.152	0		GRID	2135	0	-130.473-393.243-585	7		
GRID	1514	0	-78.276	-516.7271.619	0		GRID	2136	0	-120.773-391.723-641	7		
GRID	1515	0	-89.796	-523.4071.264	0		GRID	2137	0	-111.071-390.203-697	7		
GRID	1516	0	-102.733-530.9990.848	0			GRID	2138	0	-101.371-388.683-754	7		
GRID	1517	0	-41.5	-519.3831.812	0		GRID	2139	0	-65.817-386.246-844	7		
GRID	1518	0	-49.726	-523.1041.666	0		GRID	2140	0	-70.262-383.809-934	7		
GRID	1519	0	-65.680	-527.8751.236	0		GRID	2141	0	-53.000-381.104-1.050	7		
GRID	1520	0	-78.973	-531.8050.984	0		GRID	2142	0	-41.500-379.302-3.412	7		
GRID	1521	0	-91.3	-535.5370.745	0		GRID	2143	0	-180.000-389.378-675	0		
GRID	1522	0	-106.495-540.3690.427	0			GRID	2173	5	-116.25010.466	-453	0	
GRID	1523	0	-50.28	-541.8760.752	0		GRID	2174	5	-88.250-12.029	-640	0	
GRID	1524	0	-66.370	-542.9980.600	0		GRID	2175	5	-58.250-13.701	-795	0	
GRID	1525	0	-80.477	-544.0080.465	0		GRID	2176	5	-19.500-15.863	-1.015	0	
GRID	1526	0	-95.062	-544.9960.324	0		GRID	2177	5	-116.2503.247	-990	0	
GRID	2001	5	-136.6059.331	-355	0		GRID	2178	5	-88.250-3.438	-1.303	0	
GRID	2002	5	-131.7509.602	-382	0		GRID	2179	5	-58.250-3.643	-1.590	0	
GRID	2003	5	-100.75011.331	-560	0		GRID	2180	5	-19.500-3.908	-1.980	0	
GRID	2004	5	-75.750	-12.725	-700	0		GRID	2181	0	-71.000-305.615-2.359	0	
GRID	2005	5	-40.750	-14.678	-895	0		GRID	2182	0	-71.000-313.799-2.486	0	
GRID	2006	5	0.000	17.047	-1.115	0		GRID	2183	0	-71.000-329.799-2.524	0	
GRID	2007	5	24.947	18.341	-1.245	0		GRID	2184	0	-71.000-345.799-2.242	0	
GRID	2008	5	-141.0943.076	-845	0		GRID	2185	0	-71.000-361.799-1.776	0		
GRID	2010	5	-100.7503.353	-1.150	0		GRID	2186	0	-71.000-379.099-1.138	7		
GRID	2012	5	-75.750	-3.524	-1.410	0		GRID	2187	0	-102.000-327.437-1.904	0	
GRID	2014	5	-40.750	-3.763	-1.765	0		GRID	2188	0	-102.000-335.367-2.032	0	
GRID	2016	5	0.000	4.054	-2.190	0		GRID	2189	0	-102.000-351.367-1.954	0	
GRID	2018	5	14.758	4.143	-2.080	0		GRID	2190	0	-102.000-367.367-1.559	0	
GRID	2019	0	-180.000-381.378-790	0			GRID	2191	0	-102.000-384.667-921	7		
GRID	2020	0	-168.385-374.169-965	1			GRID	2192	0	-131.000-347.852-1.517	0		
GRID	2021	0	-157.000-366.154-1.156	0			GRID	2193	0	-131.000-356.576-1.617	0		
GRID	2022	0	-147.610-359.565-1.284	0			GRID	2194	5	-131.7503.141	-875	0	
GRID	2023	0	-143.035-356.324-1.358	1			GRID	2233	0	-41.500-497.500-2.790	0		
GRID	2024	0	-139.738-354.003-1.400	0			GRID	2242	0	-168.385-387.292-764	0		
GRID	2025	0	-122.591-341.932-1.635	1			GRID	2243	0	-157.000-385.247-862	0		
GRID	2026	0	-120.000-340.108-1.663	0			GRID	2244	0	-139.738-382.146-1.004	0		
GRID	2027	0	-93.970-321.785-2.018	1			GRID	2245	0	-131.000-380.576-1.080	0		
GRID	2029	0	-86.000	-316.174-2.124	0			GRID	2251	0	-41.500-463.052-1.021	0	
GRID	2030	0	-60.647	-298.327-2.534	1			GRID	2252	0	-67.903-482.973-716	0	
GRID	2031	0	-41.500	-293.800-4.750	0			GRID	2253	0	-81.403-493.159-560	0	
GRID	2032	0	-54.216	-293.800-2.600	0			GRID	2254	0	-92.653-501.646-430	0	
GRID	2033	0	-41.500	-293.800-3.209	0			GRID	2255	0	-103.085-509.517-309	0	
GRID	2034	0	-25.500	-293.800-9.850	0			GRID	2256	0	-110.127-514.830-228	0	
GRID	2037	0	-41.500	-308.500-5.350	0			GRID	2257	0	-57.952-504.942-2.503	0	
GRID	2038	0	-54.216	-310.784-2.852	0			GRID	2258	0	-72.299-513.261-1.801	0	
GRID	2039	0	-41.500	-308.500-3.166	0			GRID	2259	0	-84.253-520.193-1.437	0	
GRID	2040	0	-25.500	-208.500-10.350	0			GRID	2260	0	-95.334-526.621-1.091	0	
GRID	2044	0	-86.000	-332.494-2.350	0			GRID	2261	0	-110.127-533.197-606	0	
GRID	2045	0	-41.500	-324.500-5.450	0			GRID	2262	0	-41.500-541.265-833	0	
GRID	2046	0	-54.216	-326.784-2.750	0			GRID	2263	0	-59.061-542.488-670	0	
GRID	2047	0	-41.500	-324.500-2.944	0			GRID	2264	0	-73.693-543.508-531	0	
GRID	2048	0	-25.500	-324.500-10.350	0			GRID	2265	0	-87.261-544.453-399	0	
GRID	2051	0	-139.738-358.146-1.416	0			GRID	2266	0	-102.862-545.540-248	0		
GRID	2052	0	-120.000-354.601-1.763	0			GRID	2275	0	-40.750-479.550-5.000	0		
GRID	2053	0	-86.000	-348.494-2.112	0			GRID	2276	0	-29.250-479.550-6.150	0	
GRID	2054	0	-41.500	-340.500-5.450	0			GRID	2280	0	-40.750-462.820-5.500	0	
GRID	2055	0	-54.216	-342.784-2.426	0			GRID	2290	0	-29.250-462.820-7.000	0	
GRID	2056	0	-41.500	-340.500-2.598	0			GRID	2292	0	-40.750-446.100-5.650	0	
GRID	2057	0	-25.500	-340.500-10.750	0			GRID	2293	0	-29.250-446.100-7.000	0	
GRID	2060	0	-168.385-379.292-984	0			GRID	2364	0	-29.250-492.500-4.500	0		
GRID	2061	0	-157.000-377.247-1.108	0			GRID	2465	0	-40.750-492.500-4.750	0		
GRID	2062	0	-139.738-374.146-1.256	0			GRID	2466	0	-29.250-502.250-3.000	0		
GRID	2063	0	-131.000-372.576-1.328	0									

GRID	2522	0	-106.495-540.368-0.427	0	+2413		+2413A					
GRID	2523	0	-50.28 -541.876-0.752	0	+2413A	1.	.0000001					
GRID	2524	0	-66.376 -542.998-0.600	0	PBAR	2414	2	100.0	100.0	.00001	.001	+2414
GRID	2525	0	-80.477 -544.008-0.465	0	+2414							+2414A
GRID	2526	0	-95.062 -544.996-0.324	0	+2414A	1.	.0000001					
GRID	3001	0	-180.000 -391.391.000	0	PBAR	2415	2	100.0	100.0	.00001	.001	+2415
GRID	3002	0	-183.600 -318.680.000	0	+2415							+2415A
GRID	3003	0	-183.600 -333.520.000	0	+2415A	1.	.0000001					
GRID	3004	0	-183.600 -347.308.000	0	PBAR	2416	2	100.0	100.0	.00001	.001	+2416
GRID	3005	0	-183.600 -362.900.000	0	+2416							+2416A
GRID	3006	0	-183.600 -377.788.000	0	+2416A	1.	.0000001					
GRID	3007	0	-183.600 -381.378.000	0	PBAR	2417	2	100.0	100.0	.00001	.001	+2417
GRID	3008	0	-183.600 -391.391.000	0	+2417							+2417A
GRID	3009	0	-183.600 -401.762.000	0	+2417A	1.	.0000001					
GRID	3076	0	-157. -375.72 0.	0	PBAR	2418	2	100.0	100.0	.00001	.001	+2418
GRID	3077	0	-157. -371.56 0.	0	+2418							+2418A
GRID	3078	0	-157. -381.56 0.	0	+2418A	1.	.0000001					
GRID	3079	0	-157. -375.72 -10. 0	0	PBAR	2419	2	100.0	100.0	.00001	.001	+2419
GRID	3080	0	-157. -336.72 -11.46 0	0	+2419							+2419A
GRID	3081	0	-157. -367.16 -11.46 0	0	+2419A	1.	.0000001					
GRID	3082	0	-157. -371.56 -11.46 0	0	PBAR	2420	2	100.0	100.0	.00001	.001	+2420
GRID	3083	0	-157. -375.72 -11.46 0	0	+2420							+2420A
GRID	3084	0	-157. -381.56 -11.46 0	0	+2420A	1.	.0000001					
GRID	3085	0	-157. -391.1 -11.46 0	0	PBAR	2421	2	100.0	100.0	.00001	.001	+2421
GRID	3086	0	-157. -293.3 -17.75 0	0	+2421							+2421A
GRID	3087	0	-157. -336.72 -17.75 0	0	+2421A	1.	.0000001					
GRID	3088	0	-157. -354.52 -17.75 0	0	PBAR	2422	2	100.0	100.0	.00001	.001	+2422
GRID	3089	0	-157. -367.16 -17.75 0	0	+2422							+2422A
GRID	3090	0	-157. -391.1 -17.75 0	0	+2422A	1.	.0000001					
GRID	3091	0	-158.1 -371.56 0.	0	PBAR	2423	2	100.0	100.0	.00001	.001	+2423
GRID	3092	0	-158.1 -381.56 0.	0	+2423							+2423A
GRID	3093	0	-158.1 -371.56 -11.46 0	0	+2423A	1.	.0000001					
GRID	3094	0	-158.1 -381.56 -11.46 0	0	PBAR	2424	2	100.0	100.0	.00001	.001	+2424
GRID	3095	0	-155.9 -371.56 0.	0	+2424							+2424A
GRID	3096	0	-155.9 -381.56 0.	0	+2424A	1.	.0000001					
GRID	3097	0	-155.9 -371.56 -11.46 0	0	PBAR	2425	2	100.0	100.0	.00001	.001	+2425
GRID	3098	0	-155.9 -381.56 -11.46 0	0	+2425							+2425A
GRID	3196	0	-79.0 -315.2360.	0	+2425A	1.	.0000001					
GRID	3197	0	-63.0 -312.3620.	0	PBAR	2426	2	100.0	100.0	.00001	.001	+2426
GRID	3198	0	-79.0 -331.2360.	0	+2426							+2426A
GRID	3199	0	-63.0 -328.3620.	0	+2426A	1.	.0000001					
GRID	3200	0	-79.0 -316.87 0.	0	PBAR	2427	2	100.0	100.0	.00001	.001	+2427
GRID	3201	0	-71.0 -316.87 0.	0	+2427							+2427A
GRID	3202	0	-63.0 -316.87 0.	0	+2427A	1.	.0000001					
GRID	3203	0	-71.0 -316.87 0.	0	PBAR	2428	2	100.0	100.0	.00001	.001	+2428
GRID	3204	0	-71.0 -325.4 0.	0	+2428							+2428A
GRID	3205	0	-71.0 -377.0 0.	0	+2428A	1.	.0000001					
GRID	3206	0	-71.0 -325.4 -10.0 0	0	PBAR	2429	2	100.0	100.0	.00001	.001	+2429
GRID	3207	0	-71.0 -325.4 -17.5 0	0	+2429							+2429A
GRID	3208	0	-71.0 -312.6 -17.5 0	0	+2429A	1.	.0000001					
GRID	3209	0	-71.0 -312.6 -17.5 0	0	PBAR	2430	2	100.0	100.0	.00001	.001	+2430
GRID	3210	0	-71.0 -200.4 -30.5 0	0	+2430							+2430A
GRID	3211	0	-71.0 -302.58 -30.5 0	0	+2430A	1.	.0000001					
GRID	3212	0	-71.0 -312.6 -30.5 0	0	PBAR	2431	2	100.0	100.0	.00001	.001	+2431
GRID	3213	0	-71.0 -340.5 -30.5 0	0	+2431							+2431A
GRID	3500	0	-120. -334.94 -25.	0	+2432							
GRID	3501	0	-120. -346.07 -11.20	0	+2432A							
MATI	1	10.5E6	5.53E6		+2433							
MATI	2	10.5E6	4.0E6		+2433A							
MATI	3	9.9999E8	9.9999E8		+2434							
MATI	4	10.5E6	.99999E8		+2434A							
MATI	5	10.5E6	4.400E6		+2435							
MATI	601	3.150E6	4.400E6		+2435A							
MATI	606	6.825E6	4.400E6		+2436							
MATZ	701	8681000.2159000. -78300. 7164000. -78300. 2558000.			+2436A							
MATZ	702	7047000.2537000. -160600. 8488000. -160600. 2700000.			PBAR	2435	2	100.0	100.0	.00001	.001	+2435
MATZ	703	6618000.2464000. -254500. 8980000. -254500. 2625000.			+2435							+2435A
MATZ	704	6501000.2411000. -94900. 9416000. -91900. 2500000.			+2435A	1.	.0000001					
MATZ	705	6047000.2622000. -109000. 9502000. -109000. 2783000.			PBAR	2436	2	100.0	100.0	.00001	.001	+2436
MATZ	706	7849000.2569000. -130600. 7900000. -130600. 2733000.			+2436							+2436A
MATZ	707	7849000.2569000. -130000. 7920000. -130000. 2600000.			PBAR	2437	2	100.0	100.0	.00001	.001	+2437
MATZ	708	6516000.2481000. -178900. 9219000. -178900. 2700000.			+2437							+2437A
MATZ	709	6299000.2424000. -149500. 9651000. -149500. 2700000.			+2437A	1.	.0000001					
MATZ	710	6427000.2319000. -413300. 9734000. -413300. 2800000.			PBAR	2438	2	100.0	100.0	.00001	.001	+2438
PARAM	GRDPNT	0			+2438							
PARAM	WTMASS	0.00258			PBAR	2439	2	100.0	100.0	.00001	.001	+2439
PBAR	27	2	100.	9999.	+2401							
PBAR	2401	2	100.0	100.0	.00001	.001						
+2401	1.	.0000001			+2401A							
PBAR	2402	2	100.0	100.0	.00001	.001						
+2402	1.	.0000001			+2402							
PBAR	2403	2	100.0	100.0	.00001	.001						
+2403	1.	.0000001			+2403							
PBAR	2404	2	100.0	100.0	.00001	.001						
+2404	1.	.0000001			+2404							
PBAR	2405	2	100.0	100.0	.00001	.001						
+2405	1.	.0000001			+2405A							
PBAR	2406	2	100.0	100.0	.00001	.001						
+2406	1.	.0000001			+2406A							
PBAR	2407	2	100.0	100.0	.00001	.001						
+2407	1.	.0000001			+2407							
PBAR	2408	2	100.0	100.0	.00001	.001						
+2408	1.	.0000001			+2408A							
PBAR	2409	2	100.0	100.0	.00001	.001						
+2409	1.	.0000001			+2409A							
PBAR	2410	2	100.0	100.0	.00001	.001						
+2410	1.	.0000001			+2410A							
PBAR	2411	2	100.0	100.0	.00001	.001						
+2411	1.	.0000001			+2411A							
PBAR	2412	2	100.0	100.0	.00001	.001						
+2412	1.	.0000001			+2412A							
PBAR	2413	2	100.0	100.0	.00001	.001						
+2413	1.	.0000001			+2413							

+2451						+2451A	PBEAM	40	2	4.140	9999.0	284.10	+40	
+2451A	1.	.0000001				+2452	PBEAM	41	2	2.180		140.90	+41	
PBAR	2452	2	100.0	100.0	.00001	.001	+2452A	PBEAM	41	2	5.590	9999.0	376.40	+41
+2452						+2453	PBEAM	41	2	2.834		124.70	+42	
+2452A	1.	.0000001				+2453A	PBEAM	42	2	3.942	9999.0	379.30	+42	
PBAR	2453	2	100.0	100.0	.00001	.001	+2454	PBEAM	42	2	1.0	2.088	112.40	+43
+2453						+2454A	PBEAM	43	2	2.866	9999.0	350.15	+43	
+2453A	1.	.0000001				+2455	PBEAM	43	2	1.0	2.340	293.75	+44	
PBAR	2454	2	100.0	100.0	.00001	.001	+2454A	PBEAM	44	2	2.340	9999.0	293.75	+44
+2454						+2455	PBEAM	44	2	1.0	1.430	99.875	+45	
+2454A	1.	.0000001				+2455A	PBEAM	45	2	1.430	9999.0	99.875	.001	
PBAR	2455	2	100.0	100.0	.00001	.001	+2456	PBEAM	45	2	1.0	1.521	76.375	+46
+2455						+2456A	PBEAM	46	2	2.250	9999.0	215.00	.001	
+2455A	1.	.0000001				+2457	PBEAM	46	2	1.0	2.250	162.00	+47	
PBAR	2456	2	100.0	100.0	.00001	.001	+2457A	PBEAM	47	2	2.250	9999.0	162.00	+47
+2456						+2458	PBEAM	47	2	1.0	1.875	133.00	+48	
+2456A	1.	.0000001				+2458A	PBEAM	48	2	1.875	9999.0	133.00	+48	
PBAR	2457	2	100.0	100.0	.00001	.001	+2459	PBEAM	49	2	1.0	2.250	46.00	+49
+2457						+2459A	PBEAM	49	2	1.256	1.	41.26	.001	
+2457A	1.	.0000001				+2460	PBEAM	49	2	1.0	1.354	51.57	+49A	
PBAR	2458	2	100.0	100.0	.00001	.001	+2460A	PBEAM	50	2	1.354	1.	51.57	+50
+2458						+2460A	PBEAM	50	2	1.0	1.371	53.59	+50A	
+2458A	1.	.0000001				+2461	PBEAM	50	2	1.0	1.371	53.59	+51	
PBAR	2459	2	100.0	100.0	.00001	.001	+2461A	PBEAM	51	2	1.371	1.	53.59	+51A
+2459						+2462	PBEAM	51	2	1.0	1.371	53.59	+52	
+2459A	1.	.0000001				+2462A	PBEAM	52	2	1.371	1.	53.59	+52A	
PBAR	2460	2	100.0	100.0	.00001	.001	+2463	PBEAM	52	2	1.0	1.534	60.14	+52A
+2460						+2463A	PBEAM	52	2	1.0	1.534	60.14	+53	
+2460A	1.	.0000001				+2464	PBEAM	53	2	1.534	1.	60.14	.001	
PBAR	3502	2	10000.	99990.	99990.	99990.	+2464A	PBEAM	53	2	1.0	1.547	62.03	+53A
PBEAM	1	2	.690	480.000	371.450	.001	+2465	PBEAM	53	2	1.0	1.547	62.03	+53A
+1	NO	1.0		593.000	547.400		+2465A	PBEAM	54	2	1.0	1.449	76.22	+54A
+1A	0.	1.				+2466	PBEAM	54	2	1.0	1.449	76.22	+54A	
PBEAM	2	2	.690	593.000	547.400	.001	+2467	PBEAM	55	2	1.0	1.449	76.22	+54A
+2	NO	1.0		736.000	606.050		+2468	PBEAM	55	2	1.0	1.449	76.22	+54A
+2A	0.	1.				+2469	PBEAM	55	2	1.0	1.449	76.22	+54A	
PBEAM	3	2	4.140	896.000	655.500	640.	+2470	PBEAM	55	2	1.0	1.449	76.22	+54A
+3	NO	1.0		912.000	656.500		+2471	PBEAM	55	2	1.0	1.449	76.22	+54A
+3A	0.	1.				+2472	PBEAM	55	2	1.0	1.449	76.22	+54A	
PBEAM	4	2	4.140	912.000	656.500	2175.	+2473	PBEAM	56	2	1.0	1.449	76.22	+54A
+4	NO	1.0		3104.0001780.000			+2474	PBEAM	56	2	1.0	1.449	76.22	+54A
+4A	0.	1.				+2475	PBEAM	56	2	1.0	1.449	76.22	+54A	
PBEAM	5	2	4.140	3104.0001780.000		2770.	+2476	PBEAM	57	2	1.0	1.449	76.22	+54A
+5	NO	1.0		6240.0003625.000			+2477	PBEAM	57	2	1.0	1.449	76.22	+54A
+5A	0.	1.				+2478	PBEAM	57	2	1.0	1.449	76.22	+54A	
PBEAM	6	2	3.600	8000.0004245.000		5250.	+2479	PBEAM	58	2	1.0	1.449	76.22	+54A
+6	NO	1.0		7900.0004430.000			+2480	PBEAM	58	2	1.0	1.449	76.22	+54A
+6A	0.	1.				+2481	PBEAM	58	2	1.0	1.449	76.22	+54A	
PBEAM	7	2	1980.0007900.0004430.000			5250.	+2482	PBEAM	59	2	1.0	1.449	76.22	+54A
+7	NO	1.0		8100.0004170.000			+2483	PBEAM	59	2	1.0	1.449	76.22	+54A
+7A	0.	1.				+2484	PBEAM	59	2	1.0	1.449	76.22	+54A	
PBEAM	8	2	1980.0008100.0004170.000			5250.	+2485	PBEAM	60	2	1.0	1.449	76.22	+54A
+8	NO	1.0		9400.0003900.000			+2486	PBEAM	60	2	1.0	1.449	76.22	+54A
+8A	0.	1.				+2487	PBEAM	60	2	1.0	1.449	76.22	+54A	
PBEAM	9	2	1980.0009400.0003900.000			5250.	+2488	PBEAM	61	2	1.0	1.449	76.22	+54A
+9	NO	1.0		9400.0003887.062			+2489	PBEAM	61	2	1.0	1.449	76.22	+54A
+9A	0.	1.				+2490	PBEAM	61	2	1.0	1.449	76.22	+54A	
PBEAM	10	2	1980.0009400.0003887.062			5250.	+2491	PBEAM	62	2	1.0	1.449	76.22	+54A
+10	NO	1.0		10100.0003670.000			+2492	PBEAM	62	2	1.0	1.449	76.22	+54A
+10A	0.	1.				+2493	PBEAM	62	2	1.0	1.449	76.22	+54A	
PBEAM	11	2	1980.00010100.0003670.000			5250.	+2494	PBEAM	63	2	1.0	1.449	76.22	+54A
+11	NO	1.0		1000.0003691.000			+2495	PBEAM	63	2	1.0	1.449	76.22	+54A
+11A	0.	1.				+2496	PBEAM	63	2	1.0	1.449	76.22	+54A	
PBEAM	12	2	1980.0001000.0003691.000			5250.	+2497	PBEAM	64	2	1.0	1.449	76.22	+54A
+12	NO	1.0		9600.0003700.000			+2498	PBEAM	64	2	1.0	1.449	76.22	+54A
+12A	0.	1.				+2499	PBEAM	64	2	1.0	1.449	76.22	+54A	
PBEAM	13	2	1980.0009600.0003700.000			5250.	+2500	PBEAM	65	2	1.0	1.449	76.22	+54A
+13	NO	1.0		8750.0003780.000			+2501	PBEAM	65	2	1.0	1.449	76.22	+54A
+13A	0.	1.				+2502	PBEAM	65	2	1.0	1.449	76.22	+54A	
PBEAM	14	2	1980.0009750.00030780.000			5250.	+2503	PBEAM	66	2	1.0	1.449	76.22	+54A
+14	NO	1.0		8123.6303590.000			+2504	PBEAM	66	2	1.0	1.449	76.22	+54A
+14A	0.	1.				+2505	PBEAM	66	2	1.0	1.449	76.22	+54A	
PBEAM	15	2	1980.0008123.63035900.000			5250.	+2506	PBEAM	67	2	1.0	1.449	76.22	+54A
+15	NO	1.0		7200.0003340.000			+2507	PBEAM	67	2	1.0	1.449	76.22	+54A
+15A	0.	1.				+2508	PBEAM	67	2	1.0	1.449	76.22	+54A	
PBEAM	16	2	1980.0007200.0003340.000			5067.5	+2509	PBEAM	68	2	1.0	1.449	76.22	+54A
+16	NO	1.0		6425.0001872.000			+2510	PBEAM	68	2	1.0	1.449	76.22	+54A
+16A	0.	1.				+2511	PBEAM	68	2	1.0	1.449	76.22	+54A	
PBEAM	17	2	1980.0006425.0	1872.00		4910.0	+2512	PBEAM	69	2	1.0	1.449	76.22	+54A
+17	NO	1.0		1980.0006375.0	1791.00		+2513	PBEAM	69	2	1.0	1.449	76.22	+54A
+17A	0.	1.				+2514	PBEAM	69	2	1.0	1.449	76.22	+54A	
PBEAM	18	2	1980.0006375.0	1791.00		4725.0	+2515	PBEAM	70	2	1.0	1.449	76.22	+54A
+18	NO	1.0		1980.0006200.0	1470.00		+2516	PBEAM	70	2	1.0	1.449	76.22	+54A
+18A	0.	1.				+2517	PBEAM	70	2	1.0	1.449	76.22	+54A	
PBEAM	19	2	1980.0006200.0	1470.00		4515.0	+2518	PBEAM	71	2	1.0	1.449	76.22	+54A
+19	NO	1.0		1980.0006900.0	1374.00		+2519	PBEAM	71	2	1.0	1.449	76.22	+54A
+19A	0.	1.				+2520	PBEAM	71	2	1.0	1.449	76.22	+54A	
PBEAM	20	2	1980.0006900.0	1374.00		4375.5	+2521	PBEAM	72	2	1.0	1.449	76.22	+54A
+20	NO	1.0		1980.0008250.0	1167.00		+2522	PBEAM	72	2	1.0	1.449	76.22	+54A
+20A	0.	1.				+2523	PBEAM	72	2	1.0	1.449	76.22	+54A	
PBEAM	21	2	1980.0008250.0	1167.00		4117.5	+2524	PBEAM	73	2	1.0	1.449	76.22	+54A
+21	NO	1.0		1980.0008250.0	960.00		+2525	PBEAM	73	2	1.0	1.449	76.22	+54A
+21A	0.	1.				+2526	PBEAM	73	2	1.0	1.449	76.22	+54A	
PBEAM	22	2	1.	8250.000960.00		3885.	+2527	PBEAM	74	2	1.0	1.449	76.22	+54A
+22	NO	1.0		8250.000			+2528	PBEAM	74	2	1.0	1.449	76.22	+54A
+22A	0.	1.				+2529	PBEAM	74	2	1.0	1.449	76.22	+54A	
PBEAM	23	2	200.000	9999.0	9999.00	.01	+2530	PBEAM	75	2	1.0	1.449	76.22	+54A
+31	NO	1.0		197.000			+2531	PBEAM	75	2	1.0	1.449	76.22	+54A
+31A	0.	1.				+2532	PBEAM	75	2	1.0	1.449	76.22	+54A	
PBEAM	24	2	200.000	9999.0	9999.00	.01	+2533	PBEAM	76	2	1.0	1.449	76.22	+54A
+32	NO	1.0		200.000			+2534	PBEAM	76	2	1.0	1.449	76.22	+54A
PBEAM	25	2	200.000	9999.0	9999.00	.01	+2535	PBEAM	77	2	1.0	1.449	76.22	+54A
+33	NO	1.0		207.000			+2536	PBEAM	77	2	1.0	1.449		

PBEM	169	2	4.200	1.	20.00	.001	+169	+1031	NO	1.	.638206	13.539	+1031A	
+169	NO	1.0	3.210		20.00		+169A	+1031A	O.	1.	-5.84-2		+1033	
+169A	O.	1.	.0000				PBEM	1033	2	0.0327	1.	5.4	+1033	
PBEM	170	2	3.210	1.	20.00	.001	+170	+1033	NO	1.	0.03526	0.529	+1033A	
+170	NO	1.0	3.300		20.00		+170A	+1033A	O.	1.	-7.53-2		+1034	
+170A	O.	1.	.0000				PBEM	1034	2	.461906	1.	13.539	+1034A	
+171	NO	1.0	1980.000		9999.00	.001	+171	+1034	NO	1.	.371385	8.407	+1034A	
+171	NO	1.0	1980.000		9999.00		+171A	+1034A	O.	1.	.217		+1035	
+171A	O.	1.	.0000				PBEM	1035	2	0.1134	1.	.241	+1035	
PBEM	172	2	1.230	1.	84.87	.001	+172	+1035	NO	1.	0.0864	.140	+1035A	
+172	NO	1.0	1.000		57.12		+172A	+1035A	O.	1.	.270		+1036	
+172A	O.	1.	.2063				PBEM	1036	2	.371385	1.	7.726	+1036A	
PBEM	173	2	1.125	1.	41.92	.001	+173	+1036	NO	1.	.208421	2.466	+1036A	
+173	NO	1.0	1.188		46.53		+173A	+1036A	O.	1.	.562		+1037	
+173A	O.	1.	.0541				PBEM	1037	2	0.0864	1.	.140	+1037A	
PBEM	174	2	.750	1.	12.63	.001	+174	+1037	NO	1.	0.06364	.0759	+1037A	
+174	NO	1.0	1.063		23.78		+174A	+1037A	O.	1.	.303		+1038	
+174A	O.	1.	.3448				PBEM	1038	2	0.54612	1.	5.551	+1038	
PBEM	175	2	1059.3001		9999.00	.001	+175	+1038	NO	1.	0.58212	5.807	+1038A	
+175	NO	1.0	841.500		9999.00		+175A	+1038A	O.	1.	-6.38-2		+1039	
+175A	O.	1.	.0000				PBEM	1039	2	0.19404	1.	4.814	+1039A	
PBEM	176	2	75.000	1.	2.98	.001	+176	+1039	NO	1.	0.15936	2.212	+1039A	
+176	NO	1.0	79.000		12.10		+176A	+1039A	O.	1.	.196		+1040	
+176A	O.	1.	.0000				PBEM	1040	2	0.15936	1.	2.212	+1040	
PBEM	177	2	79.000	1.	12.10	.001	+177	+1040	NO	1.	0.1296	.140	+1040A	
+177	NO	1.0	82.000		29.71		+177A	+1040A	O.	1.	.206		+1041	
+177A	O.	1.	.0000				PBEM	1041	2	0.216	1.	.233	+1041A	
PBEM	178	2	82.000	1.	29.71	.001	+178	+1041	NO	1.	0.1411	.0995	+1041A	
+178	NO	1.0	85.000		29.71		+178A	+1041A	O.	1.	.419		+1043	
+178A	O.	1.	.0000				PBEM	1043	2	.1148	1.	.239	+1043A	
PBEM	179	2	85.000	1.	9999.00	46.06	.001	+179	+1043	NO	1.	.118531	.255	+1043A
+179	NO	1.0	90.000				+1043A	+1043A	O.	1.	-3.20-2		+1047	
PBEM	180	2	90.000	1.	9999.0	46.06	.001	+180	+1047	NO	1.	0.02568	1.	+1047A
+180	NO	1.0	55.800		31.90		+1047A	+1047A	O.	1.	0.02513		+1047A	
PBEM	181	2	990.000	1.	9999.00	.001	+181	+1047A	NO	1.	0.02891	0.119	+1045A	
+181	NO	1.0					+1045	+1045A	O.	1.	.624-2		+1045A	
PBEM	182	2	990.000	1.	9999.00	.001	+182	+1045A	NO	1.	.11033	.193	+1046A	
+182	NO	1.0					+1046	+1046A	O.	1.	.140		+1046A	
PBEM	1001	2	1.34778	1.	14.325		+1001	+1046A	NO	1.	0.02568	1.	+1047	
+1001	NO	1.	1.32951		14.209		+1001A	+1047	NO	1.	0.02513		+1047A	
+1001A	O.	1.	1.36-2				+1047A	+1047A	O.	1.	.216-2		+1048	
PBEM	1002	2	1.32951	1.	14.209		+1002	+1047A	NO	1.	.103033	.193	+1048A	
+1002	NO	1.	1.23648		13.640		+1002A	+1048	NO	1.	.082328	.123	+1048A	
+1002A	O.	1.	7.25-2				+1048A	+1048A	O.	1.	.223		+1049	
PBEM	1003	2	1.23648	1.	13.640		+1003	+1049A	NO	1.	0.082328	1.	+1049A	
+1003	NO	1.	1.09137		12.836		+1003A	+1049A	O.	1.	.637		+1049A	
+1003A	O.	1.	.125				+1049A	+1049A	O.	1.	.435		+1050	
PBEM	1004	2	1.09137	1.	12.836		+1004	+1049A	NO	1.	.12.9	.952	+1050A	
+1004	NO	1.	0.85176		11.727		+1004A	+1050	NO	1.	2.9	.15	+1050A	
+1004A	O.	1.	.247				+1050A	+1050A	O.	1.	.1.266		+1051	
PBEM	1005	2	0.85176	1.	11.727		+1005	+1050A	NO	1.	0.41616	1.	+1051A	
+1005	NO	1.	0.57309		10.782		+1005A	+1051	NO	1.	0.39988	4.214	+1051A	
+1005A	O.	1.	.391				+1051A	+1051A	O.	1.	.517		+1052	
PBEM	1007	2	0.5201	1.	4.137		+1007	+1051A	NO	1.	0.28808	1.	+1052A	
+1007	NO	1.	0.5704		4.188		+1007A	+1052	NO	1.	0.22399	2.323	+1052A	
+1007A	O.	1.	.9-2.3-2				+1052A	+1052A	O.	1.	.250		+1053	
PBEM	1009	2	0.05068	1.	7.4		+1009	+1052A	NO	1.	0.22399	1.	+1053A	
+1009	NO	1.	0.05704				+1009A	+1053	NO	1.	0.13195	.877	+1053A	
+1009A	O.	1.	.-118				+1053A	+1053A	O.	1.	.517		+1054	
PBEM	1010	2	0.68448	1.	11.387		+1010	+1053A	NO	1.	10.15	1.	+1054A	
+1010	NO	1.	0.65988		10.584		+1010A	+1054	NO	1.	2.3	.15	+1054A	
+1010A	O.	1.	.366-2				+1054A	+1054A	O.	1.	.1.261		+1055	
PBEM	1011	2	0.65988	1.	3.834		+1011	+1054A	NO	1.	0.0772	1.	+1056	
+1011	NO	1.	0.58224		3.781		+1011A	+1055	NO	1.	.07868	.116	+1056A	
+1011A	O.	1.	.125				+1055A	+1055A	O.	1.	.-1.90-2		+1057	
PBEM	1012	2	0.4852	1.	2.985		+1012	+1055A	NO	1.	0.07868	1.	+1057A	
+1012	NO	1.	0.3817		3.085		+1012A	+1056	NO	1.	0.06116	.0701	+1057A	
+1012A	O.	1.	.239				+1056A	+1056A	O.	1.	.251		+1058	
PBEM	1013	2	0.3817	1.	4.113		+1013	+1056A	NO	1.	0.06116	1.	+1058A	
+1013	NO	1.	0.2527		3.779		+1013A	+1058A	O.	1.	.587		+1058A	
+1013A	O.	1.	.407				+1058A	+1058A	O.	1.	.0332	.173	+1058A	
PBEM	1014	2	1.1795	1.	32.608		+1014	+1058A	NO	1.	.593		+1059	
+1014	NO	1.	1.24325		37.764		+1014A	+1059	NO	1.	8.3	.173	+1059A	
+1014A	O.	1.	.5-2.6-2				+1059A	+1059A	O.	1.	.1.8	.15	+1059A	
PBEM	1015	2	1.24325	1.	35.291		+1015	+1059A	NO	1.	1.287		+1060	
+1015	NO	1.	1.26225		36.787		+1015A	+1060	NO	1.	0.6004	1.	+1060A	
+1015A	O.	1.	.-1.52-2				+1060A	+1060A	O.	1.	.157		+1060A	
PBEM	1016	2	1.0098	1.	36.787		+1016	+1060A	NO	1.	0.513	1.	+1061	
+1016	NO	1.	0.897		28.514		+1016A	+1061	NO	1.	.2508	.265	+1061A	
+1016A	O.	1.	.118				+1061A	+1061A	O.	1.	.687		+1062	
PBEM	1017	2	0.897	1.	28.514		+1017	+1061A	NO	1.	.687		+1062A	
+1017	NO	1.	0.7106		17.378		+1017A	+1062	NO	1.	.6	.249	+1062A	
+1017A	O.	1.	.232				+1062A	+1062A	O.	1.	.1.5	.15	+1062A	
PBEM	1018	2	0.88825	1.	17.378		+1018	+1062A	NO	1.	.1.259		+1063	
+1018	NO	1.	0.569		7.448		+1018A	+1063	NO	1.	.563180	1.	+1063	
+1018A	O.	1.	.438				+1063A	+1063A	O.	1.	.12.840		+1071A	
PBEM	1020	2	.174168	1.	2.924		+1020	+1063A	NO	1.	.456388		+1071A	
+1020	NO	1.	.192741		3.774		+1020A	+1064	NO	1.	.1071		+1072	
+1020A	O.	1.	.-101				+1064A	+1064A	O.	1.	.209		+1072A	
PBEM	1024	2	.173225	1.	1.931		+1024	+1064A	NO	1.	.682631	1.	+1072A	
+1024	NO	1.	.137473		.991		+1024A	+1065	NO	1.	.8.277		+1072A	
+1024A	O.	1.	.230				+1065A	+1065A	O.	1.	.665175		+1072A	
PBEM	1025	2	.137473	1.	.991		+1025	+1065A	NO	1.	.7.072		+1072A	
+1025	NO	1.	.085198		4.751		+1025A	+1066	NO	1.	.6.65175		+1072A	
+1025A	O.	1.	.470				+1066A	+1066A	O.	1.	.105		+1074A	
PBEM	1026	2	0.53326	1.	4.915		+1026	+1066A	NO	1.	.6.75834	1.	+1074A	
+1026	NO	1.	.0.56896		4.995		+1026A	+1067	NO	1.	.32.711		+1075A	
+1026A	O.	1.	.-6.48-2				+1067A	+1067A	O.	1.	.6.08902	25.555	+1075A	
PBEM	1027	2	0.97536	1.	4.995		+1027	+1067A	NO	1.	.1075A	0.	+1075A	
+1027	NO	1.	.93792		4.058		+1027A	+1068	NO	1.	.1075A	0.	+1075A	
+1027A	O.	1.	.3.91-2				+1068A	+1068A						

+1081	NO	1.	.842997	31.687	+1081A		+1119	NO	1.	0.35112	1.197	+1119A	
+1081A	O.	1.	.756112	6.83-2	+1082	PBEAM	+1119A	O.	1.	.117		+1120	
PBEAM	1082	2	.756112	1.	+1082A		PBEAM	1120	2	0.31416	1.	+1120A	
+1082	NO	1.	.694238	19.190	+1083	PBEAM	+1120A	O.	1.	0.27047		+1120A	
+1082A	O.	1.	.853-2		+1083A		+1120A	O.	1.	.149		+1121	
PBEAM	1083	2	0.90882	1.	+1084	PBEAM	+1121	2	0.36593	1.	.570	+1121A	
+1083	NO	1.	0.84618	2.210	+1084A		+1121A	O.	1.	.120		+1121A	
+1083A	O.	1.	.714-2		+1085	PBEAM	+1122	2	0.23987	1.	.388	+1122	
PBEAM	1084	2	0.9402	1.	+1085A		+1122A	O.	1.	0.2193	.324	+1122A	
+1084	NO	1.	0.8128	2.065	+1086	PBEAM	+1122A	O.	1.	.896-2		+1123	
+1084A	O.	1.	.145		+1086A		PBEAM	1123	2	2.193	1.	.577	+1123A
PBEAM	1085	2	0.48768	1.	+1087		+1123A	O.	1.	1.7255	.319	+1123A	
+1085	NO	1.	0.39912	2.251	+1087A		+1123A	O.	1.	.239		+1124	
+1085A	O.	1.	.200		+1088	PBEAM	+1124	2	1.7255	1.	0.319	+1124A	
PBEAM	1086	2	0.73172	1.	+1088A		+1124A	O.	1.	1.411	.086	+1124A	
+1086	NO	1.	0.7194	4.277	+1089	PBEAM	+1124A	O.	1.	.201		+1125	
+1086A	O.	1.	.170-2		+1089A		PBEAM	1125	2	1.411	1.	.086	+1125A
PBEAM	1087	2	0.7194	1.	+1090		+1125A	O.	1.	1.122	.37	+1125A	
+1087	NO	1.	0.66748	3.682	+1090A		+1125A	O.	1.	.228		+1126	
+1087A	O.	1.	.749-2		+1091	PBEAM	+1126	2	0.290	1.	.15	+1126A	
PBEAM	1088	2	0.48544	1.	+1091A		+1126A	O.	1.	.231		+1127	
+1088	NO	1.	0.448	3.136	+1092	PBEAM	+1127	2	0.230	1.	.15	+1127A	
+1088A	O.	1.	.802-2		+1092A		+1127A	O.	1.	.0180		+1128	
PBEAM	1089	2	0.616	1.	+1093	PBEAM	+1128	2	0.180	1.	.15	+1128A	
+1089	NO	1.	0.59752	2.951	+1093A		+1128A	O.	1.	.182		+1129	
+1089A	O.	1.	.305-2		+1094	PBEAM	+1129	2	24.900	1.	2.334	+1131	
PBEAM	1090	2	0.59752	1.	+1094A		+1131	O.	1.	.502		+1131A	
+1090	NO	1.	0.56496	2.968	+1095	PBEAM	+1132	2	22.300	1.	1.258	+1132	
+1090A	O.	1.	.560-2		+1095A		+1132	O.	1.	43.800	6.091	+1132A	
PBEAM	1091	2	.964044	1.	+1096	PBEAM	+1133	2	43.800	1.	6.091	.001	
+1091	NO	1.	.900046	33.946	+1096A		+1133	O.	1.	46.400	8.843	+1133A	
+1091A	O.	1.	.867-2		+1097	PBEAM	+1134	2	17.900	1.	1.469	+1136	
PBEAM	1092	2	.80058	1.	+1097A		+1136	O.	1.	35.300	1.	4.849	.001
+1092	NO	1.	.740025	7.040	+1098	PBEAM	+1135	2	39.91	100.	10.5	+1137	
+1092A	O.	1.	.786-2		+1098A		+1137	O.	1.	40.37		+1137A	
PBEAM	1093	2	0.9867	1.	+1099	PBEAM	+1136	2	15.900	1.	1.286	+1139	
+1093	NO	1.	0.9295	2.678	+1099A		+1139	O.	1.	31.800	4.283	+1139A	
+1093A	O.	1.	.597-2		+1099B	PBEAM	+1137	2	35.300	1.	.836	+1140	
PBEAM	1094	2	0.7605	1.	+1100		+1137	O.	1.	39.910	7.360	+1140A	
+1094	NO	1.	0.70344	1.909	+1100A		+1137A	O.	1.	.123		+1140A	
+1094A	O.	1.	.780-2		+1101	PBEAM	+1138	2	39.91	100.	10.5	+1138	
PBEAM	1095	2	0.62528	1.	+1101A		+1138	O.	1.	40.37		+1138A	
+1095	NO	1.	0.56416	5.554	+1102	PBEAM	+1139	2	15.900	1.	1.286	+1139	
+1095A	O.	1.	.103		+1102A		+1139	O.	1.	31.800	4.283	+1139A	
PBEAM	1096	2	1.12832	1.	+1103	PBEAM	+1140	2	20.300	1.	1.601	+1143	
+1096	NO	1.	1.03488	3.138	+1103A		+1140	O.	1.	39.600	5.214	+1143A	
+1096A	O.	1.	.864-2		+1104	PBEAM	+1141	2	28.200	1.	.836	+1144	
PBEAM	1097	2	0.58212	1.	+1104A		+1140A	O.	1.	28.200	2.827	+1144A	
+1097	NO	1.	0.52038	.794	+1105	PBEAM	+1141	2	28.200	1.	.827	+1144A	
+1097A	O.	1.	.112		+1105A		+1140A	O.	1.	.673		+1144A	
PBEAM	1098	2	0.46256	1.	+1106	PBEAM	+1142	2	32.16	100.	7.94	+1142	
+1098	NO	1.	0.41088	.692	+1106A		+1142	O.	1.	32.70		+1142A	
+1098A	O.	1.	.118		+1107	PBEAM	+1142A	O.	1.	.167-2		+1143	
PBEAM	1099	2	0.56496	1.	+1107A		+1142A	O.	1.	1.67-2		+1143A	
+1099	NO	1.	0.50864	3.405	+1108	PBEAM	+1143	2	12.800	1.	.537	+1144	
+1099A	O.	1.	.105		+1108A		+1143	O.	1.	26.050	1.860	+1144A	
PBEAM	1100	2	0.32368	1.	+1109	PBEAM	+1144	2	11.190	1.	.541	+1144	
+1100	NO	1.	0.2702	1.360	+1109A		+1144	O.	1.	23.000	1.894	+1144A	
+1100A	O.	1.	.180		+1110	PBEAM	+1145	2	23.000	1.	.894	.001	
PBEAM	1101	2	0.2895	1.	+1110A		+1145	O.	1.	25.560	3.414	+1145A	
+1101	NO	1.	0.237	1.561	+1111	PBEAM	+1145A	O.	1.	.105		+1145A	
+1101A	O.	1.	.199		+1112	PBEAM	+1146	2	25.56	100.	6.5	+1146	
PBEAM	1102	2	.803494	1.	+1112A		+1146	O.	1.	27.16		+1146A	
+1102	NO	1.	.756148	18.318	+1113	PBEAM	+1146A	O.	1.	.674		+1146A	
+1102A	O.	1.	.607-2		+1114		+1146A	O.	1.	.674		+1146A	
PBEAM	1103	2	.869368	1.	+1114A		+1147	O.	1.	.674		+1147	
+1103	NO	1.	.808308	3.656	+1115	PBEAM	+1147	2	9.060	1.	.492	+1147	
+1103A	O.	1.	.716-2		+1115A		+1147	O.	1.	19.800	1.700	+1147A	
PBEAM	1104	2	0.56848	1.	+1116	PBEAM	+1147A	O.	1.	.744		+1148	
+1104	NO	1.	0.53648	2.977	+1116A		+1147A	O.	1.	26.050	1.860	+1148A	
+1104A	O.	1.	.579-2		+1117	PBEAM	+1148	2	7.640	1.	.210	+1148	
PBEAM	1105	2	0.53648	1.	+1117A		+1148	O.	1.	17.500	.929	+1148A	
+1105	NO	1.	0.49880	2.015	+1118	PBEAM	+1148A	O.	1.	.784		+1149	
+1105A	O.	1.	.726-2		+1119		+1148A	O.	1.	.929	.001	+1149A	
PBEAM	1106	2	0.49888	1.	+1119A		+1149	O.	1.	18.620	1.942	+1149A	
+1106	NO	1.	0.45356	2.014	+1120	PBEAM	+1149A	O.	1.	.062		+1150	
+1106A	O.	1.	.951-2		+1121		+1149A	O.	1.	.062		+1150A	
PBEAM	1107	2	0.70875	1.	+1121A		+1150	O.	1.	.19.3		+1150A	
+1107	NO	1.	0.664	1.764	+1122	PBEAM	+1150A	O.	1.	.110		+1152	
+1107A	O.	1.	.652-2		+1123		+1152	O.	1.	.110		+1152A	
PBEAM	1108	2	0.3984	1.	+1123A		+1152A	O.	1.	.110		+1153	
+1108	NO	1.	0.37695	.600	+1124	PBEAM	+1153	2	20.300	1.	.870	+1153A	
+1108A	O.	1.	.553-2		+1125		+1153	O.	1.	.118		+1153A	
PBEAM	1109	2	0.37695	1.	+1125A		+1153A	O.	1.	.094		+1154	
+1109	NO	1.	0.3324	1.367	+1126	PBEAM	+1154	2	17.900	1.	.630	+1154	
+1109A	O.	1.	.126		+1127		+1154	O.	1.	.20.300	.870	+1154A	
PBEAM	1110	2	0.35456	1.	+1127A		+1154A	O.	1.	.126		+1155	
+1110	NO	1.	0.31472	.368	+1128	PBEAM	+1155	2	15.900	1.	.470	+1155A	
+1110A	O.	1.	.119		+1129		+1155	O.	1.	17.900	.630	+1155A	
PBEAM	1111	2	0.15736	1.	+1129A		+1155A	O.	1.	.118		+1156	
+1111	NO	1.	0.1266	1.156	+1130	PBEAM	+1156	2	14.000	1.	.340	+1156A	
+1111A	O.	1.	.218		+1131		+1156	O.	1.	16.900	.470	+1156A	
PBEAM	1112	2	0.1728	1.	+1131A		+1156	O.	1.	.20.300	.870	+1156A	
+1112	NO	1.	0.16064	.262	+1132	PBEAM	+1157	2	12.800	1.	.260	+1157	
+1112A	O.	1.	.729-2		+1133		+1157	O.	1.	14.000	.340	+1157A	
PBEAM	1113	2	0.16064	1.	+1133A		+1157	O.	1.	.14.000	.340	+1157A	
+1113	NO	1.	0.13784	.163	+1134	PBEAM	+1158	2	11.190	1.	.280	+1158	
+1113A	O.	1.	.153		+1135		+1158	O.	1.	12.800	.260	+1158A	
PBEAM	1114	2	0.13784	1.	+1135A		+1158	O.	1.	.134		+1159	
+1114	NO	1.	0.12232	.117	+1136	PBEAM	+1159	2	9.060	1.	.260	+1159	
+1114A	O.	1.	.119		+1137		+1159	O.	1.	.127		+1160	
PBEAM	1115	2	0.12232	1.	+1137A		+1160	O.	1.	.127		+1160A	
+1115	NO	1.	0.108	.991	+1138	PBEAM	+1160	2	12.800	1.	.260	+1160A	
+1115A	O.	1.	.124		+1139		+1160	O.	1.	.127		+1161	
PBEAM	1116	2	.337714	1.	+1139A		+1161	O.	1.	.127		+1161A	
+1116	NO	1.	.312716	19.868	+1140	PBEAM	+1161</td						

+1159 NO	1.0	11.190	.280	+1159A		+1206 NO	1.0	7.530	.03700	+1206A	
+1159A 0.	1.	.210		+1160		+1206A 0.	1.	.3859		+1207	
PBEM 1160	2	7.640	.170	+1160A		PBEM 1207	2	7.530	.03700	+1207	
+1160 NO	1.0	9.060	.260	+1207	NO	1.0	3.950	.00580	+1207A		
+1160A 0.	1.	.170		+1207A 0.		+1207A 0.	1.	.6237		+1208	
PBEM 1161	2	7.100	.120	+1161		PBEM 1208	2	12.820	1.	+1208	
+1161 NO	1.0	7.640	.170	+1161A		+1208 NO	1.0	12.820	1.	+1208A	
+1161A 0.	1.	.073		+1208A 0.		+1208A 0.	1.	.0000		+1209	
PBEM 1162	2	43.800	1.	.5189	+1162	PBEM 1209	2	12.820	1.	+1209	
+1162 NO	1.0	41.600	5.636	+1162A		+1209 NO	1.0	10.280	.07100	+1209A	
+1162A 0.	1.	.052		+1209A 0.		+1209A 0.	1.	.2199		+1210	
PBEM 1163	2	39.600	1.	.4049	+1163	PBEM 1210	2	10.280	.07100	+1210	
+1163 NO	1.0	43.800	5.170	+1163A		+1210 NO	1.0	6.960	.02500	+1210A	
+1163A 0.	1.	.101		+1210A 0.		+1210A 0.	1.	.3852		+1211	
PBEM 1164	2	35.300	1.	.3053	+1164	PBEM 1211	2	6.960	.02500	+1211	
+1164 NO	1.0	39.600	4.049	+1164A		+1211 NO	1.0	3.640	.00370	+1211A	
+1164A 0.	1.	.115		+1211A 0.		+1211A 0.	1.	.6264		+1212	
PBEM 1165	2	31.800	1.	.2364	+1165	PBEM 1212	2	0.7055	100.	+1212	
+1165 NO	1.0	35.300	3.040	+1165A		+1212 NO	1.	0.63	.025	+1212A	
+1165A 0.	1.	.104		+1212A 0.		+1212A 0.	1.	.113		+1213	
PBEM 1166	2	28.200	1.	.1762	+1166	PBEM 1213	2	12.600	1.	+1213	
+1166 NO	1.0	31.800	2.354	+1166A		+1213 NO	1.0	11.690	.70000	+1213A	
+1166A 0.	1.	.120		+1167		+1213A 0.	1.	.0749		+1214	
PBEM 1167	2	26.050	1.	.1444	+1167	PBEM 1214	2	11.690	1.	+1214	
+1167 NO	1.0	28.200	1.754	+1167A		+1214 NO	1.0	9.420	.05530	+1214A	
+1167A 0.	1.	.079		+1214A 0.		+1214A 0.	1.	.2151		+1215	
PBEM 1168	2	23.000	1.	.1274	+1168	PBEM 1215	2	9.420	1.	+1215	
+1168 NO	1.0	26.050	1.431	+1168A		+1215 NO	1.0	6.360	.01900	+1215A	
+1168A 0.	1.	.124		+1215A 0.		+1215A 0.	1.	.3878		+1216	
PBEM 1169	2	19.800	1.	.1019	+1169	PBEM 1216	2	6.360	1.	+1216	
+1169 NO	1.0	23.000	1.269	+1169A		+1216 NO	1.0	3.330	.00290	+1216A	
+1169A 0.	1.	.150		+1216A 0.		+1216A 0.	1.	.6254		+1217	
PBEM 1170	2	17.500	1.	.706	+1170	PBEM 1217	2	11.400	1.	+1217	
+1170 NO	1.0	19.800	1.007	+1170A		+1217 NO	1.0	10.620	.40000	+1217A	
+1170A 0.	1.	.123		+1217A 0.		+1217A 0.	1.	.0708		+1218	
PBEM 1171	2	16.900	1.	.588	+1171	PBEM 1218	2	10.620	1.	+1218	
+1171 NO	1.0	17.500	.709	+1171A		+1218 NO	1.0	8.570	.01970	+1218A	
+1171A 0.	1.	.035		+1218A 0.		+1218A 0.	1.	.2137		+1219	
PBEM 1181	2	0.341	100.	.4328	.001	+1181	PBEM 1219	2	8.570	1.	+1219
+1181 NO	1.	1.0025	10.953		+1181A		+1219 NO	1.0	5.750	.00760	+1219A
+1181A 0.	1.	.994		+1219A 0.		+1219A 0.	1.	.3939		+1220	
PBEM 1182	2	1.604	1.	.7500000	.265	+1182	PBEM 1220	2	5.750	1.	+1220
+1182 NO	1.0	1.365	70.00000	+1182A		+1220 NO	1.0	2.990	.00130	+1220A	
+1182A 0.	1.	.1611		+1220A 0.		+1220A 0.	1.	.6316		+1223	
PBEM 1183	2	68.240	1.	.7000000	.265	+1183	PBEM 1231	2	.189	1.	+1223
+1183 NO	1.0	53.180	18.30000	+1183A		+1231 NO	1.0	.614	.25.02095	+1231A	
+1183A 0.	1.	.2481		+1231A 0.		+1231A 0.	1.	-.10587		+1232	
PBEM 1184	2	1.064	1.	.1830000	.265	+1184	PBEM 1232	2	.280	1.	+1232
+1184 NO	1.0	.715	5.30000	+1184A		+1232 NO	1.0	.315	.2.20872	+1232A	
+1184A 0.	1.	.3923		+1232A 0.		+1232A 0.	1.	-.1169		+1233	
PBEM 1185	2	.715	1.	.530000	.265	+1185	PBEM 1233	2	.152	1.	+1233
+1185 NO	1.0	.370	.65000	+1185A		+1233 NO	1.0	.168	.1.42177	+1233A	
+1185A 0.	1.	.6362		+1233A 0.		+1233A 0.	1.	-.1018		+1234	
PBEM 1186	2	22.130	1.	.700000	.265	+1186	PBEM 1234	2	.226	1.	+1234
+1186 NO	1.0	21.000	7.00000	+1186A		+1234 NO	1.0	.253	.93783	+1234A	
+1186A 0.	1.	.0524		+1234A 0.		+1234A 0.	1.	-.1127		+1235	
PBEM 1187	2	21.000	1.	.700000	.265	+1187	PBEM 1235	2	.125	1.	+1235
+1187 NO	1.0	16.200	.95000	+1187A		+1235 NO	1.0	.136	.65330	+1235A	
+1187A 0.	1.	.2581		+1235A 0.		+1235A 0.	1.	-.0779		+1238	
PBEM 1188	2	16.200	1.	.95000	.265	+1188	PBEM 1236	2	.115	1.	+1236
+1188 NO	1.0	10.900	.30000	+1188A		+1236 NO	1.0	.125	.48321	+1236A	
+1188A 0.	1.	.3911		+1236A 0.		+1236A 0.	1.	-.0837		+1237	
PBEM 1189	2	10.900	1.	.30000	.265	+1189	PBEM 1237	2	.175	1.	+1237
+1189 NO	1.0	5.690	.04000	+1189A		+1237 NO	1.0	.192	.34903	+1237A	
+1189A 0.	1.	.6281		+1237A 0.		+1237A 0.	1.	-.0922		+1238	
PBEM 1190	2	3.414	100.	.1	.001	+1190	PBEM 1238	2	.096	1.	+1238
+1190 NO	1.	2.802	1.0	+1190A		+1238 NO	1.0	.105	.20137	+1238A	
+1190A 0.	1.	.197		+1238A 0.		+1238A 0.	1.	-.0959		+1241	
PBEM 1191	2	18.680	1.	.580000	.265	+1191	PBEM 1241	2	16.200	1.	+1241
+1191 NO	1.0	18.680	5.80000	+1191A		+1241 NO	1.0	53.180	.26000	+1241A	
+1191A 0.	1.	.0000		+1241A 0.		+1241A 0.	1.	-.10660		+1242	
PBEM 1192	2	18.680	1.	.580000	.265	+1192	PBEM 1242	2	14.740	1.	+1242
+1192 NO	1.0	14.740	.28300	+1192A		+1242 NO	1.0	16.200	.01850	+1242A	
+1192A 0.	1.	.2358		+1242A 0.		+1242A 0.	1.	-.0944		+1243	
PBEM 1193	2	14.740	1.	.28300	.265	+1193	PBEM 1243	2	13.370	1.	+1243
+1193 NO	1.0	9.990	.09600	+1193A		+1243 NO	1.0	14.740	.01400	+1243A	
+1193A 0.	1.	.3841		+1243A 0.		+1243A 0.	1.	-.0975		+1244	
PBEM 1194	2	9.990	1.	.09600	.265	+1194	PBEM 1244	2	13.370	1.	+1244
+1194 NO	1.0	5.250	.01400	+1194A		+1244 NO	1.0	13.370	.00940	+1244A	
+1194A 0.	1.	.6220		+1244A 0.		+1244A 0.	1.	.0000		+1245	
PBEM 1195	2	35.960	1.	.514100	.265	+1195	PBEM 1245	2	11.130	1.	+1245
+1195 NO	1.0	33.740	.513000	+1195A		+1245 NO	1.0	13.370	.00690	+1245A	
+1195A 0.	1.	.0637		+1245A 0.		+1245A 0.	1.	-.1829		+1246	
PBEM 1196	2	33.740	1.	.513000	.265	+1196	PBEM 1246	2	10.280	1.	+1246
+1196 NO	1.0	26.740	.22400	+1196A		+1246 NO	1.0	11.130	.00450	+1246A	
+1196A 0.	1.	.2315		+1246A 0.		+1246A 0.	1.	-.0794		+1247	
PBEM 1197	2	26.740	1.	.22400	.265	+1197	PBEM 1247	2	9.420	1.	+1247
+1197 NO	1.0	18.100	.07510	+1197A		+1247 NO	1.0	10.280	.00330	+1247A	
+1197A 0.	1.	.3854		+1247A 0.		+1247A 0.	1.	-.0873		+1248	
PBEM 1198	2	18.100	1.	.07510	.265	+1198	PBEM 1248	2	8.570	1.	+1248
+1198 NO	1.0	9.500	.01143	+1198A		+1248 NO	1.0	9.420	.00210	+1248A	
+1198A 0.	1.	.6232		+1248A 0.		+1248A 0.	1.	-.0945		+1251	
PBEM 1199	2	0.924	100.	.032	.001	+1199	PBEM 1251	2	10.900	1.	+1251
+1199 NO	1.	.07535	.025	+1199A		+1251 NO	1.0	35.740	.08200	+1251A	
+1199A 0.	1.	.203		+1251A 0.		+1251A 0.	1.	-.10652		+1252	
PBEM 1200	2	15.070	1.	.320000	.265	+1200	PBEM 1252	2	9.990	1.	+1252
+1200 NO	1.0	15.070	.320000	+1200A		+1252 NO	1.0	10.900	.00604	+1252A	
+1200A 0.	1.	.0000		+1201		+1252A 0.	1.	-.0871		+1253	
PBEM 1201	2	15.070	1.	.320000	.265	+1201	PBEM 1253	2	9.050	1.	+1253
+1201 NO	1.0	13.370	.17300	+1201A		+1253 NO	1.0	9.990	.00460	+1253A	
+1201A 0.	1.	.1195		+1253A 0.		+1253A 0.	1.	-.0987		+1254	
PBEM 1202	2	13.370	1.	.17300	.265	+1202	PBEM 1254	2	8.120	1.	+1254
+1202 NO	1.0	8.120	.05600	+1202A		+1254 NO	1.0	9.050	.00315	+1254A	
+1202A 0.	1.	.4886		+1203		+1254A 0.	1.	-.1093		+1255	
PBEM 1203	2	8.120	1.	.05600	.265	+1203	PBEM 1255	2	7.530	1.	+1255
+1203 NO	1.0	4.260	.00880	+1203A		+1255 NO	1.0	8.120	.00232	+1255A	
+1203A 0.	1.	.6236		+1204		+1255A 0.	1.	-.0754		+1256	
PBEM 1204	2	15.940	1.	.200000	.265	+1204	PBEM 1256	2	6.960	1.	+1256
+1204 NO	1.0	13.940	.200000	+1204A		+1256 NO	1.0	7.530	.00149	+1256A	
+1204A 0.	1.	.1339		+1205		+1256A 0.	1.	-.0787		+1257	
PBEM 1205	2	13.940</									

+1258	NO	1.0	6.360	.00074		+1258A	PBEAM	2051	2	166.334	1.	34.600	.001	+2051	
+1258A	NO	1.	5.690	1.	.00089	3.000	+1261	PBEAM	2052	2	150.000	1.	18.200	.001	+2052
+1261	NO	1.0	18.490	.01210		+1261A	PBEAM	2053	2	133.800	1.	1.860			
+1261A	O.	1.		-1.0587		+1262	PBEAM	2054	2	119.900	1.	1.840	.001	+2053	
+1262	NO	1.0	5.250	1.	.00068	2.000	+1262A	PBEAM	2055	2	119.900	1.	1.430	.001	+2054
+1262A	O.	1.		-0.0804		+1263	PBEAM	2055	2	105.994	1.	1.021			
+1263	NO	1.0	5.250	.00068		+1263A	PBEAM	2055	2	105.994	1.	.914	.001	+2055	
+1263A	O.	1.		-1.000		+1264	PBEAM	2056	2	92.900	1.	.632			
+1264	NO	1.0	4.750	.00047	.900	+1264A	PBEAM	2056	2	92.900	1.	.632	.001	+2056	
+1264A	O.	1.		-1.088		+1265	PBEAM	2057	2	79.720	1.	.350			
+1265	NO	1.0	4.260	.00023	.400	+1265A	PBEAM	2058	2	64.600	1.	.204	.001	+2058	
+1265A	O.	1.		-0.0755		+1266	PBEAM	3001	2	15.8	1000.	9999.	.001	+3001P	
+1266	NO	1.0	3.640	1.	.00017	.300	+1266A	PBEAM	3001P	1.	22.			+3001PA	
+1266A	O.	1.		-0.0817		+1267	PBEAM	3002	2	100.	1000.	9999.	.001	+3002P	
+1267	NO	1.0	3.640	.00017		+1267A	PBEAM	3002P	1.	22.			+3002PA		
+1267A	O.	1.		-0.0890		+1268	PBEAM	3003	2	.726	1000.	2.32	.001	+3003P	
+1268	NO	1.0	2.990	1.	.00008	.075	+1268A	PBEAM	3004	2	.726	1000.	3.92	.001	+3004P
+1268A	O.	1.		-1.076		+1269	PBEAM	3005	2	.726	1000.	3.92	.001	+3005P	
+1269	NO	1.	2038.9591	.2060	.001	+1270	PBEAM	3005P	1.						
+1270	NO	1.	3806.7001	19.530	.001	+1271	PBEAM	3006	2	.726	1000.	3.92	.001	+3006P	
+1271	NO	1.	5574.4201	37.000	.001	+1272	PBEAM	3007	2	.726	1000.	3.92	0.	+3007P	
+1272	NO	1.	3618.9001	18.660	.001	+1273	PBEAM	3008	2	.726	1000.	10.78	15.	+3008P	
+1273	NO	1.	3618.9001	18.660	.001	+1274	PBEAM	3009	2	.726	1000.	3.92	4.5	+3009P	
+1274	NO	1.	1663.3351	.320	.001	+1275	PBEAM	3131	2	23109.8	99999.	.01	.01	+3131P	
+1275	NO	1.	1429.5691	1.290	.001	+1276	PBEAM	3131P	1.	99999.0				+3131PA	
+1276	NO	1.	3214.8001	10.645	.001	+1277	PBEAM	3132	2	99999.0	99999.	.01	.01	+3132P	
+1277	NO	1.	3214.8001	10.645	.001	+1278	PBEAM	3132P	1.	22109.8				+3132PA	
+1278	NO	1.	4999.9951	20.000	.001	+1279	PBEAM	3133	2	100.	999.	.01	.01	+3133P	
+1279	NO	1.	4999.9951	20.000	.001	+1280	PBEAM	3133P	1.	1.276					
+1280	NO	1.	3331.6651	11.600	.001	+1281	PBEAM	3134	2	22.	.01	26.89	.01	+3135P	
+1281	NO	1.	3331.6651	11.600	.001	+1282	PBEAM	3134P	1.	999.					
+1282	NO	1.	1663.3351	3.200	.001	+1283	PBEAM	3135	2	22.	.01	.01	.01	+3136P	
+1283	NO	1.	1117.8811	.770	.001	+1284	PBEAM	3135P	1.	22.	.01	.01	.01	+3137P	
+1284	NO	1.	2357.6401	.485	.001	+1285	PBEAM	3136	2	22.	.01	.01	.01	+3138P	
+1285	NO	1.	2357.6401	.485	.001	+1286	PBEAM	3136P	1.	22.	.01	.01	.01	+3139P	
+1286	NO	1.	3597.3991	.200	.001	+1287	PBEAM	3137	2	22.	.01	.01	.01	+3140P	
+1287	NO	1.	2870.5271	.200	.001	+1288	PBEAM	3137P	1.	22.	.01	.01	.01	+3141P	
+1288	NO	1.	1965.2331	.470	.001	+1289	PBEAM	3138	2	100.	999.	.01	.01	+3142P	
+1289	NO	1.	1965.2331	.470	.001	+1290	PBEAM	3138P	1.	22.	.01	.01	.01	+3143P	
+1290	NO	1.	1059.9391	.740	.001	+1291	PBEAM	3140	2	100.	14.5	.001	.001	+3144P	
+1291	NO	1.	617.4821	.108	.001	+1292	PBEAM	3140P	1.	22.	.01	.01	.001	+3145P	
+1292	NO	1.	1398.2001	.104	.001	+1293	PBEAM	3141	2	60.	99999.	99999.	.01	+3145PA	
+1293	NO	1.	1398.2001	.104	.001	+1294	PBEAM	3141P	1.	22.	.01	.01	.001	+3146P	
+1294	NO	1.	2178.8191	.100	.001	+1295	PBEAM	3142	2	60.	99999.	99999.	.01	+3147P	
+1295	NO	1.	2178.8191	.100	.001	+1296	PBEAM	3142P	1.	22.	.01	.01	.01	+3147PA	
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+1300	NO	1.	832.8001	.110	.001	+1301	PBEAM	3145	2	60.	99999.	99999.	.01	+3152P	
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+1302	NO	1.	1210.7881	.120	.001	+1303	PBEAM	3146	2	60.	99999.	99999.	.01	+3154P	
+1303	NO	1.	1210.7881	.120	.001	+1304	PBEAM	3146P	1.	22.	.01	.01	.01	+3155P	
+1304	NO	1.	852.6001	.126	.001	+1305	PBEAM	3147	2	60.	99999.	99999.	.01	+3156P	
+1305	NO	1.	852.6001	.126	.001	+1306	PBEAM	3147P	1.	22.	.01	.01	.01	+3157P	
+1306	NO	1.	494.5051	.131	.001	+1307	PBEAM	3148	2	60.	99999.	99999.	.01	+3158P	
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+1313	NO	1.	277.4001	1.339	.001	+1314	PBEAM	3154	2	60.	99999.	99999.	.01	+3165P	
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+1320	NO	1.	73.8001	.395	.001	+1321	PBEAM	3160	2	60.	99999.	99999.	.01	+3172P	
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PSHEAR	3158	2	.275	RBAR	121	34	35	123456	123
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PSHELL	604	601	.378	RBAR	125	69	70	123456	123
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PSHELL	606	606	.247	RBAR	127	115	116	123456	123
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PSHELL	611	606	.279	RBAR	132	68	66	123456	123
PSHELL	612	5	.252	RBAR	133	81	121	123456	123
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PSHELL	661	1	.219	RBAR	1321	24	1024	123456	123
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PSHELL	664	1	.207	RBAR	1324	25	2025	123456	123
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PSHELL	667	1	.190	RBAR	1327	27	1027	123456	123
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PSHELL	671	1	.133	RBAR	1331	30	1030	123456	123
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PSHELL	682	1	.127	RBAR	1342	44	2044	123456	123
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PSHELL	684	1	.068	RBAR	1344	46	2046	123456	123
PSHELL	701	701	.175	RBAR	1345	47	1047	123456	123
PSHELL	702	702	.121	RBAR	1346	47	2047	123456	123
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PSHELL	705	705	.074	RBAR	1349	52	1052	123456	123
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RBAR	23	283	407	123456	1355	56	1056	123456	123
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RBAR	91	31	1031	123456	1357	60	1060	123456	123
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RBAR	111	79	1079	123456	1377	74	1074	123456	123
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RBAR	113	82	1082	123456	1379	75	1075	123456	123
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RBAR	115	94	1094	123456	1381	76	1076	123456	123

RBAR	1382	76	2076	123456	123	RBAR	1518	104	2104	123456	123
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RBAR	1384	77	2077	123456	123	RBAR	1520	105	2105	123456	123
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RBAR	1387	80	1080	123456	123	RBAR	1523	107	2107	123456	123
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RBAR	1389	81	1081	123456	123	RBAR	1525	108	2108	123456	123
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RBAR	1451	1	1001	123456	123	RBAR	1571	142	1142	123456	123
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RBAR	1468	10	2010	123456	123	RBAR	2250	508	2508	123456	123
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RBAR	1472	14	2014	123456	123	RBAR	2254	510	2510	123456	123
RBAR	1473	16	1016	123456	123	RBAR	2255	511	1511	123456	123
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RBAR	1475	18	1018	123456	123	RBAR	2257	512	1512	123456	123
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RBAR	1477	173	1173	123456	123	RBAR	2259	513	1513	123456	123
RBAR	1478	173	2173	123456	123	RBAR	2260	513	2513	123456	123
RBAR	1479	174	1174	123456	123	RBAR	2261	514	1514	123456	123
RBAR	1480	174	2174	123456	123	RBAR	2262	514	2514	123456	123
RBAR	1481	175	1175	123456	123	RBAR	2263	515	1515	123456	123
RBAR	1482	175	2175	123456	123	RBAR	2264	515	2515	123456	123
RBAR	1483	176	1176	123456	123	RBAR	2265	516	1516	123456	123
RBAR	1484	176	2176	123456	123	RBAR	2266	516	2516	123456	123
RBAR	1485	177	1177	123456	123	RBAR	2267	517	1517	123456	123
RBAR	1486	177	2177	123456	123	RBAR	2268	517	2517	123456	123
RBAR	1487	178	1178	123456	123	RBAR	2269	518	1518	123456	123
RBAR	1488	178	2178	123456	123	RBAR	2270	518	2518	123456	123
RBAR	1489	179	1179	123456	123	RBAR	2271	519	1519	123456	123
RBAR	1490	179	2179	123456	123	RBAR	2272	519	2519	123456	123
RBAR	1491	180	1180	123456	123	RBAR	2273	520	1520	123456	123
RBAR	1492	180	2180	123456	123	RBAR	2274	520	2520	123456	123
RBAR	1493	194	1194	123456	123	RBAR	2275	521	1521	123456	123
RBAR	1494	194	2194	123456	123	RBAR	2276	521	2521	123456	123
RBAR	1501	96	1096	123456	123	RBAR	2277	522	1522	123456	123
RBAR	1502	96	2096	123456	123	RBAR	2278	522	2522	123456	123
RBAR	1503	97	1097	123456	123	RBAR	2279	523	1523	123456	123
RBAR	1504	97	2097	123456	123	RBAR	2280	523	2523	123456	123
RBAR	1505	98	1098	123456	123	RBAR	2281	524	1524	123456	123
RBAR	1506	98	2098	123456	123	RBAR	2282	524	2524	123456	123
RBAR	1507	99	1099	123456	123	RBAR	2283	525	1525	123456	123
RBAR	1508	99	2099	123456	123	RBAR	2284	525	2525	123456	123

RBAR	3169	3084	3094	123456	123		SPC1	5	456	1125	1126	1127				
RBAR	3170	3077	3095	123456	123		SPC1	5	456	1128	1129	1130	1131	1132	1133	
RBAR	3171	3078	3096	123456	123		SPC1	5	456	1134	1135	1136	1137	1138	1139	
RBAR	3172	3082	3097	123456	123		SPC1	5	456	1140	1141	1142				
RBAR	3173	3084	3098	123456	123		SPC1	5	456	1143						
RBAR	3419	3203	182	123456	123		SPC1	5	456	1178	1179	1180	1194			
RBAR	3420	3203	183	123456	123		SPC1	5	456	1181	THRU	1193				
RBAR	3421	3205	185	123456	123		SPC1	5	456	1233	2233					
RBAR	3422	3205	186	123456	123		SPC1	5	456	1242	1243	1244	1245			
RBAR	3423	3201	3204	123456	5		SPC1	5	456	1251	THRU	1266				
RBAR	3424	3204	3207	123456	3		SPC1	5	456	1292	1293	1464	1465	1466	1467	
RBAR	3425	3208	3212	123456	3		SPC1	5	456	1501	THRU	1526				
RBAR	3426	3208	3209	123456	123		SPC1	5	456	2001	2002	2003	2004	2005	2006	
SPC1	3	1	359	360	361	362	364	367		SPC1	5	456	2007	2008	2010	2012
SPC1	3	1	368	369	370	371	373	381		SPC1	5	456	2018	2173	2174	2175
SPC1	3	1	383	384	385	386	387	389		SPC1	5	456	2019	THRU	2027	
SPC1	3	1	390	391	392	393	408		SPC1	5	456	2029	2030	2032	2033	
SPC1	3	156	36	42	50	437	59	431		SPC1	5	456	2031	2034	2037	2040
SPC1	3	156	71	84	298	286	117	285		SPC1	5	456	2044	2046	2047	2051
SPC1	3	156	163	164	153	154	155	156		SPC1	5	456	2054	2057	2066	2069
SPC1	3	156	267	268	458	459				SPC1	5	456	2055	2056	2060	2061
SPC1	3	156	283	284	282	281	405			SPC1	5	456	2064	2065	2067	2068
SPC1	4	234	36	42	50	437	59	431		SPC1	5	456	2074	2075	2076	2078
SPC1	4	234	71	84	298	286	117	285		SPC1	5	456	2079	2114	2275	2276
SPC1	4	234	163	164	153	154	155	156		SPC1	5	456	2081	2085	2086	2087
SPC1	4	234	267	268	458	459				SPC1	5	456	2094	2114	2121	
SPC1	4	234	283	284	282	281	405			SPC1	5	456	2096	2097	2098	2100
SPC1	5	4	3009							SPC1	5	456	2102	2103	2104	2105
SPC1	5	4	3077							SPC1	5	456	2108	2109	2110	2111
SPC1	5	456	251	256	261	262	266			SPC1	5	456	2125	2126	2127	
SPC1	5	456	1001	1002	1003	1004	1005	1006		SPC1	5	456	2130	2131	2132	2133
SPC1	5	456	1007	1008	1010	1012	1014	1016		SPC1	5	456	2134	2135	2136	2137
SPC1	5	456	1018	1173	1174	1175	1176	1177		SPC1	5	456	2140	2141	2142	
SPC1	5	456	1019	THRU	1027					SPC1	5	456	2143			
SPC1	5	456	1029	1030	1032	1033	1038	1039		SPC1	5	456	2178	2179	2180	2194
SPC1	5	456	1031	1034	1037	1040	1045	1048		SPC1	5	456	2181	THRU	2193	
SPC1	5	456	1044	1046	1047	1051	1052	1053		SPC1	5	456	2242	2243	2244	2245
SPC1	5	456	1054	1057	1066	1069	1079	1082		SPC1	5	456	2251	THRU	2266	
SPC1	5	456	1055	1056	1060	1061	1062	1063		SPC1	5	456	2292	2293	2464	2465
SPC1	5	456	1064	1065	1067	1068	1072	1073		SPC1	5	456	2501	THRU	2526	
SPC1	5	456	1074	1075	1076	1077	1078	1080		SPC1	5	456	3091	3092	3093	3094
SPC1	5	456	1079	1114	1275	1276	1280	1290		SPC1	5	456	3095	3096	3097	3098
SPC1	5	456	1081	1085	1086	1087	1088			SPC1	5	123456	701	702	703	
SPC1	5	456	1094	1114	1121					SPCADD	1	3	5			
SPC1	5	456	1096	1097	1098	1099	1100	1101		SPCADD	2	4	5			
SPC1	5	456	1102	1103	1104	1105	1106	1107		SUPPORT	42	156				
SPC1	5	456	1108	1109	1110	1111	1112	1113		ENDDATA						